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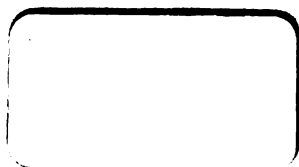
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Commerce *and* Finance

Designed as a Text Book for Schools and
a Volume of Business Information
for the General Reader.

By O. M. POWERS

Principal of the Metropolitan Business College
Author of The Complete Accountant, Etc.

CHICAGO:
POWERS & LYONS

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PREFACE.

As a consequence of the diffusion of general intelligence, the improvement in means of transportation, and the rapid transmission of information, the business world of to-day is more highly organized, its interests more intimately connected and interwoven, and its methods more complex and intricate than ever before. To meet present conditions the successful business man of to-day must possess a broader and more intelligent view, as well as a readier comprehension of all those problems which enter into business life. He must be conversant in a degree with the operations, silent though powerful, going on about him. In short, he must be better educated. In the preparation of this book the aim has been to bring together a mass of important facts and information of a business nature not found in books generally, or not found in concise, tangible or logical form, and present the various subjects so clearly that the ordinary reader or student may readily grasp them.

The book is a combination of history and economics. It relates to both the past and present. In the first 146 pages of the book, embracing a history of commerce and of banking, a foundation is laid for the proper consideration of the subjects which follow. In dealing with historical facts we have aimed to show why commerce flowed in certain channels at certain times and the influences which have affected its progress and development. In the discussion of the various subjects which follow, the aim has constantly been to reach the basic principles underlying each, to discover the theories upon which business is done. Necessarily the subjects could not be treated in exhaustive detail in a work of this size, but the most important features are set forth, and a basis is thus furnished for

those who wish to pursue any special line of study farther into its details and intricacies.

The author gratefully acknowledges himself indebted for valuable assistance and suggestions in the preparation of this work to Mr. Fred W. Gookin, formerly cashier of the Northwestern National Bank of Chicago; Mr. F. H. Rawson, Vice-President Union Trust Co., Chicago; Mr. H. P. Simonton, Corporation Attorney; Mr. C. S. Pellet, Ex-President Chicago Board of Underwriters; Mr. J. H. Emerson, General Agent New York Life Ins. Co.; Mr. Chas. D. Snow, of the Chicago Board of Trade; Mr. W. E. Ray, of the Chicago Journal; Mr. B. J. Fitzgerald, Real Estate Broker; Mr. John F. Scanlan, of the Custom House; Mr. W. A. Douglass, Manager of R. G. Dun & Co., Chicago; Mr. John E. Gardin, Manager Foreign Exchange Department First National Bank, Chicago, and many others, and yet these gentlemen are in no way responsible for any possible errors or inaccuracies of statement that may appear in this book.

O. M. P.

Chicago, September 1, 1902.

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HISTORY OF COMMERCE.

CHAPTER I.

ANCIENT COMMERCE.

ORIGIN OF COMMERCE; EGYPTIANS; PHOENICIANS; GREEKS.

The history of commerce is the history of civilization. In his barbarous state man's wants are few and simple, limited to his physical existence, such as food, clothing and shelter, but as he advances in the scale of intelligence his wants increase and he requires not only the comforts and conveniences of life but even the luxuries. Civilized man is never satisfied, for no sooner is a want supplied than another arises in its place, and under that stimulus he achieves mighty conquests over the forces of nature and attains to a high degree of development in character. Commerce is one of the means by which various peoples have at different times undertaken to supply their needs.

No civilized community produces all the things which it consumes. A portion of its needs must be supplied by an interchange of products with other communities or nations and this is the beginning of commerce, either domestic or foreign. Moreover, it may be impossible for a nation to produce all that it needs to consume, owing to physical peculiarities of the country, its lack of coal, wood, or ore, its climate, etc. Thus England cannot grow sufficient corn to feed its people, but it manufactures more cloth than is necessary to clothe them. A warm country cannot grow wheat successfully, but it may produce cotton or rice in abundance.

Commerce also depends in a measure upon the national skill of a people in the manufacture of commodities. The Swiss have long been noted for the manufacture of clocks, watches, and fine lace; the French for the production of wine and silk. Another nation may be deficient in both the possession of natural products and skill as manufacturers, but have peculiar skill as navigators, and become the carriers of goods. Such were the Italian cities which, in the middle ages, grew opulent from the profits of the carrying trade. Then again a nation may combine all three of these functions, and become producers, manufacturers and carriers in a greater or less degree, reaping a profit from each, as the principal nations of Europe, and the United States are doing at the present time.

The ancient commerce of the world was carried on chiefly upon the shores of the Mediterranean Sea. When we read in Genesis that Joseph was sold by his brethren for twenty pieces of silver to "a company of Ishmaelites come from Gilead with their camels bearing spicery and balm and myrrh, going to carry it down to Egypt," we get a glimpse of the ancient commerce of that oldest of empires, Egypt, drawing supplies from the thrifty nations to the east of the Mediterranean. Caravans of camels laden with goods and silver crossed the desert and carried into Egypt wool, ivory, gold-dust, spices and slaves from Arabia and the far east. In exchange Egypt furnished large quantities of wheat, barley, rice, cotton and flax from the fertile valley of the Nile, besides quantities of linen, and cotton cloth, as well as utensils and pottery. From the nature of the conditions, Egypt has always been essentially an agricultural country. The broad, level valley of the Nile, enriched annually by the overflow, yielded abundant crops, and the people were apparently content with their harvests, devoting themselves but little to manufacture or commerce. The sea coast was low, with no good harbors, thus uninviting to commerce, while a scarcity of wood made ship-building a practical

National
Employments

Commerce of
Egypt

impossibility. The Egyptians cultivated the arts and sciences, and their kings busied themselves in erecting those wonderful monuments in the form of tombs, which still remain to a considerable extent. Although industrious at home, they did not seem inclined to go abroad or engage in foreign trade, and this was carried on chiefly by Arabs and Greeks. After the conquests of Alexander the Great, the port of Alexandria became the great commercial metropolis of the world, and Greek merchants settled there in large numbers.

The first navigators and carriers of goods by water, of which we read, were the Phoenicians who inhabited the narrow strip of coast land along the east of the Mediterranean Sea. Having a large sea frontage with little interior distance, these people were naturally attracted to seafaring occupations. Their coast abounded in good harbors, and their abundant forests supplied the materials for ship building, while agriculture was difficult on account of the hilly and rocky nature of the land. Here we see the natural conditions exactly reversed from those of Egypt, with the effect of developing a nation of navigators and traders instead of farmers, as in Egypt. The enterprise and activity of the Phoenicians were wonderful. They founded the cities of Tyre and Sidon and built up a large and profitable system of commerce. Intellectual activity and diligence in business led these people to many discoveries, among which were the making of glass, the art of dyeing purple and writing by means of letters. They were also distinguished by their skill in casting metals, weaving, architecture and in various other directions. Sidonian garments, Tyrian purple, Phoenician glass and articles of ivory, gold and other metals were precious and coveted wares in all antiquity. The forests of Lebanon, along the eastern border, supplied them with material for ship-building, and with their oared barks they navigated the coast and islands of the sea, trading in their own productions and those of the far east, spices, frankincense, oil,

The
Phoenicians

wine, wheat and slaves. They made their way along the coast, and out as far as Cyprus, where they founded a colony, then to the islands of the Aegean Sea and Greece to the north, and to Egypt and Africa in the south. They ventured west as far as Spain, which they found rich in minerals, especially silver. The discovery of Spain with its rich mines brought immense wealth to the Phoenicians, and they proceeded to develop the resources of the country with vigor. It is said that the Phoenicians drew such vast wealth from the mines of Spain that their ships carried silver anchors. Besides silver they received from Spain considerable quantities of tin, lead, iron and even gold, as well as a large yield of wheat, wine, oil, wax, fruit and fine wool.

The Phoenicians used their possessions in Spain as a basis for trading voyages farther west. They passed the straits of Gibraltar and went northward among the British isles, where they obtained large quantities of tin. Proceeding still farther, they entered the Baltic Sea, and visited the rude people in north-western Europe, purchasing wool, hides, furs, copper and other metals, and giving in exchange their own manufactures, such as purple dyed robes, carpets, and fine cloths, works in gold, silver, ivory, amber and glass. The Phoenicians imported largely raw materials, which they made up in Tyre and Sidon, and then exported the finished product either by their own ships seaward or by caravans to the east. Thus they were a manufacturing as well as a maritime nation. They are said to have rounded the Cape of Good Hope on voyages to India about the year B. C. 600.

**Phoenician
Voyages**

This enterprising people became not only masters of the Mediterranean Sea, but were instrumental in scattering the germs of taste and intelligence, elevating the standard of civilization and establishing a system of commerce throughout a large portion of the ancient civilized world. They no doubt learned the use of gold

**An Instrument
of Civilization**

and silver as money from the Babylonians, but they introduced and popularized the use of these metals as money throughout the Mediterranean by stamping and issuing coins of both metals in various sizes and denominations. The ratio of silver to gold in value at that time was about 13 to 1. The Phoenicians also introduced into commerce a regular system of weights and measures, and the use of bills of exchange, as a means of payment.

But owing to troublesome wars and confusion caused by the contests between the Babylonian and Assyrian empires about the eighth century B. C. the commerce of Phoenicia

The Greeks began to decline, and after the conquest and destruction of the cities by the Greeks under Alexander the Great, including Tyre, by the celebrated siege which lasted seven months (B. C. 332), the commerce of this once energetic people passed over to the Greeks, who were then a dominant nation in the arts and sciences. The Greeks were not essentially a commercial people, being more devoted to art, architecture and literature, nevertheless they had observed the methods of the Phoenicians and became their competitors to a considerable extent in commerce, and having finally conquered them, inherited their trade. The Greeks were even greater colonizers than the Phoenicians, and established flourishing cities in Asia Minor and along the Black Sea,

The Greeks in Asia many of which not only became important maritime but manufacturing cities as well. Smyrna, founded by the Greeks at that time, is still a flourishing emporium, noted principally for its rugs. These cities became the centers for the products of that region, such as cereals, fish, timber, salt, leather, wood, skins and slaves. Wheat was the most important product and came chiefly from the south of Russia, as it does at the present time, and supplied Athens and Corinth with breadstuffs.

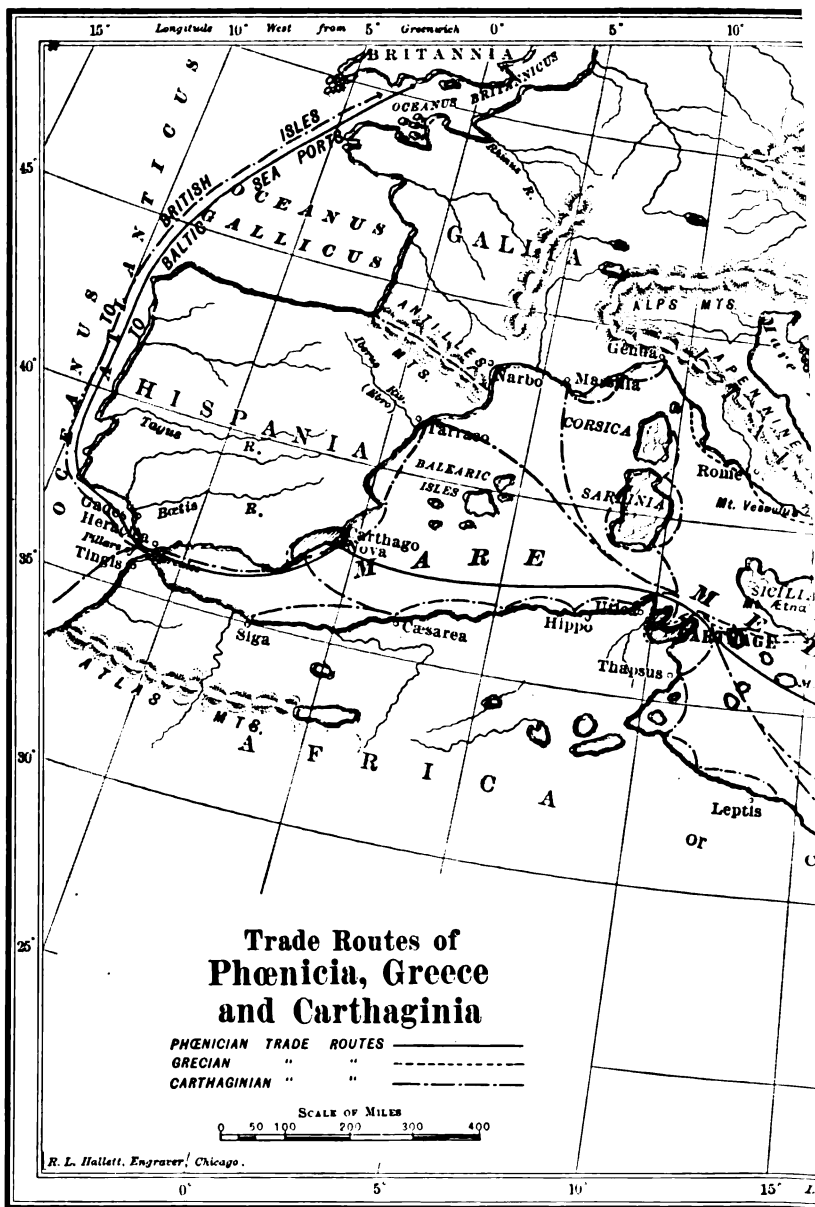
The Greeks founded several colonies in Italy, chiefly in the southern portion. They took possession of and cultivated the

island of Sicily, where the fertility of the soil proved a great attraction to settlers, and there built up the rich and powerful cities of Agrigentum and Syracuse. These cities exported from Sicily large quantities of wheat, fruit, wine and oil, and conducted an extensive carrying trade with Africa and Egypt. From Italy the Greek colonies exported wine and cattle and imported articles of Greek manufacture, such as pottery, metal wares and clothing. Most of the Greek colonies in Italy, however, gave themselves up to a life of pleasure, luxury and ease, and thus in time became an easy prey to the more sturdy Romans.

**The Greeks
in Italy**

Along the north coast of Africa, between Carthage and Egypt, the Greeks established a number of settlements, the most important of which was Cyrene. A genial and healthful climate, combined with a fertile soil to bring prosperity, and Cyrene carried on an active trade by land with Egypt and the interior of Africa, from which it derived horses, grain, oil, dates, amethysts, onyx and precious stones, and by sea with Greece, Italy and Asia Minor, exchanging these products for cloth and wine. As before stated, Greek merchants carried on most of the commerce of Egypt, both domestic and foreign.

**The Greeks
in Africa**







CHAPTER II.

ANCIENT COMMERCE—Continued.

THE CARTHAGINIANS; THE ROMAN EMPIRE.

About the year 850 B. C. the Phoenicians had founded the city of Carthage on the north coast of Africa, planting there a colony which was destined to have a remarkable career. The city was built upon a peninsula forty-five miles around, with a neck only three miles across. The land along the adjacent coast was fertile and well watered, producing wheat, barley, wine and oil in abundance. A small bay in the gulf of Tunis afforded an excellent harbor for the city's commerce. Endowed with Phoenician energy and skill, Carthage soon gained great wealth and power, conquering a portion of Sicily and the northwest coast of Africa, thereby securing complete control of the western half of the Mediterranean Sea.

The Carthaginians founded colonies in the South of Spain, and the riches of the Spanish peninsula were poured into the lap of Carthage. Her ships passed the strait of Gibraltar and continued the voyages formerly made by the Phoenicians to the north. They also turned southward, sailing along the west coast of Africa in search of tropical products. They sent caravans into the interior of Africa and Persia and as far east as the Persian Gulf. Hither were brought gold, ivory, slaves, ostrich feathers, ebony and dates, and in exchange the Carthaginian traders exported wheat, meal, wine, ornaments and gaudy clothes, much the same as worn by many of those peoples at the present day.

After the Persian conquest, many of the merchant princes of Tyre and other Phoenician cities emigrated to Carthage, and thus the city grew in wealth and commerce. At one time she

is said to have possessed territory having a sea line of 1,400 miles and containing 300 cities. In the silver mines of Spain she employed not less than 40,000 men. The Carthaginian merchants did not carry for hire, but dealt in their own commodities, thus requiring an extensive system of warehouses and shipping facilities. They inaugurated a system of marine insurance and made loans on bottomry. It has been supposed that their leathern money was in the nature of bank bills.

**The Greatness
of Carthage**

Thus we see that Greece controlled the commerce of the eastern half of the Mediterranean Sea, while Carthage dominated that of the western half. Both of these nations reached their golden era of prosperity, their commercial zenith, about three hundred years before Christ; both declined and gave way to a stronger power about the same time, and to the same power. While these nations were thus dominating the commerce of the Mediterranean there was growing a power in Italy that was to conquer and supplant them both. Like the sturdy tree which grows slowly that it may knit its fibers closely, Rome required five hundred years before she was sufficiently strong to wrest the commercial and political supremacy of the Mediterranean from Greece and Carthage. She was founded about 750 B. C. and began her conquest against Carthage and Greece about 250 B. C.

The dividing line between Greece and Carthage seemed to bisect the island of Sicily. The western half belonged to Carthage and the eastern half to Greece. Carthage attempted the conquest of the eastern half of the island. This led to a desperate struggle with Syracuse and the Greek colonies. Then Rome and Carthage began a contest which lasted with varying results for over a hundred years. It was in many respects the most determined and relentless warfare ever waged, and both parties seemed to realize that it was a fight to the finish, and must result in the extermination

**The Decline
of Carthage**

of the one power or the other. The First Punic War lasted from 264 to 241 B. C., when Carthage was defeated and compelled to give up Sicily, Sardinia and Corsica. After twenty-three years, war was again declared between these two inveterate enemies, and in 218 B. C., Hannibal, the great Carthaginian general, led an army by way of Spain over the Alps into Italy, and at one time it seemed as if Rome would be completely crushed beneath his mighty blows. But the tide of war turned again, and the Carthaginians were defeated and made a dependent province of Rome. Finally, in the Third Punic War, B. C. 149, the Romans utterly destroyed the city of Carthage, carrying its inhabitants who survived the siege into captivity, burning its houses and demolishing its temples. Not content with even this, they plowed the land where Carthage had stood, sowed it in salt, thus making it utterly barren, and then pronounced a curse upon any one who should attempt to rebuild the city. Could revenge be deeper or more complete? Unfortunately, for us, they also destroyed the libraries and records of this remarkable people, so that all we know of them has come down to us through their enemies. We are told that Carthage was a city twenty miles in circumference, and contained not less than one million inhabitants. The land about the city was laid out like a vast garden, and embellished with innumerable magnificent villas.

In the same year, Corinth, one of the greatest of the Greek capitals and seaports, was captured, plundered of vast wealth and given to the flames by the Romans. Athens and her magnificent harbor of Piraeus fell into the same hands sixty years later, and thus the seat of commercial greatness moved westward to the banks of the Tiber.

The Romans were naturally statesmen and warriors rather than merchants. They were better adapted to govern than to trade or work. With Roman supremacy, set in an era of growth and activity in trade and commerce throughout the then civil-

ized world, which lasted five hundred years. The effect of Roman domination was to put an end to all the little wars that had been previously waged among adjacent peoples. By becoming Roman provinces they exchanged their independence for peace, and peace with unrestricted commerce fostered trade in all parts of the empire. The Mediterranean nations were brought closer to each other, both politically and commercially, and became common inheritors of such knowledge as was then in the world. Arts, sciences, improved agriculture and manufactures spread among them. The city of Rome became the center of the system, and from one quarter wheat had to be brought, from another clothing, from another luxuries, and Rome had to pay for it all in coin. She had nothing to export in return. How could she continue to pay out coin? The coin was continually flowing into her treasury, as tribute from all of her numerous provinces, and then it found its way back again to the provinces in payment for merchandise. By this there was a tendency to an equalization of wealth in all parts of the empire, and a perpetual movement of money.

Rome, in its golden era of the Emperor Augustus, had a population of 1,800,000 people, besides its numerous suburbs, and to supply the needs of this vast population required a large number of merchants and tradesmen. Besides these, extensive industries were carried on by skilled labor to supply the demands of the rich and idle class. Plutarch tells us that there were trade-guilds in wood-carving, moulding, dyeing, lace-making, cabinet-making, and among workers in bronze, stucco and gold. There were extensive establishments for the manufacture of glass and pottery, both in Rome and other Italian cities. Cloth and clothing were made by the weavers of Rome in large quantities, the wool coming principally from Spain and the cotton from Egypt. The arts of paper-making and book-binding were carried to a much higher

**Roman
Supremacy**

**Industries of
Rome**

degree of perfection than ever before, and in all the great abbeys and museums there was an apartment—the Scriptorium—for the copying and making of books.

In order to facilitate their military operations, the Romans built an extensive system of highways, the finest the world had ever seen. Beginning at the Golden Milestone, which was placed

Roman Roads in the Forum by Augustus to mark the central point of the Roman Empire, and from which distances were calculated, these roads extended in

a network in all directions over Italy, and reached as far as France, Spain and Britain in the west. In Greece, the mountains of Epirus and Macedon were pierced with a great highway, and in Asia Minor, Palestine and North Africa they built roads leading to the principal seaports. These Roman roads were built with a view to permanency, and many of them remain as important and useful highways of commerce to this day. Wonderful examples of engineering skill are frequently exhibited in their construction, being in some instances hewn out of the mountain side and in others composed of heavy stone viaducts and bridges which still remain to attest the skill of the builders. These roads were as useful to Rome as railroads are to us. They were furnished with milestones and post houses kept in perfect order. A regular system of posts was established so that the Emperor might have speedy information of events happening in the different provinces. The postmen traveled according to regular time tables, changing horses at each relay, the same as in this country before the advent of railways. Although built primarily for military purposes, so that troops could be conveyed readily to any part of the Empire, yet these roads and the post system were highly instrumental in fostering and developing commerce as well as civilization in general.

We will now take up the consideration of the Eastern provinces of Rome, and by these we mean Greece and the Greek Islands, Asia Minor, Phoenicia, Palestine, Egypt and the north

coast of Africa. These provinces were all placed in immediate and direct communication, not only with each other, but with Rome, and the laws were so framed as to protect intercourse and commerce generally, but especially with the seat of government. Greece had become considerably reduced in population, especially in her island colonies, and agriculture declined. The result was that large areas were now given to grazing and the raising of sheep and horses. This supplied wool for cloth and horses for the Roman army and for the chariots and other vehicles. Athens supplied Rome with statuary, cloth and perfumery, Corinth with bronze, and Paros with the finest of marble. Asia Minor and ports of the Black Sea carried on an extensive trade and manufacture, supplying Rome with cloths of superior texture, carpets, works of art in marble, bronze, gold and silver. Through these cities, too, came a large portion of Roman imports from the far East—Persia, India and China—slaves, precious stones, silks and perfumes. From Syria and Phoenicia came rugs, glass, pottery, purple dyes, cedar-wood and woodenware. Egypt sent to Rome, through its commercial metropolis, Alexandria, immense quantities of wheat, barley, cloth and colored glass. It also forwarded the slaves, ivory and ostrich feathers of Africa; perfumes, incense, gold and horses from Arabia; spices, cinnamon, ginger, myrrh, precious stones, pearls and silk from India. Large quantities of grain came from the north coast of Africa, where the Carthaginians had formerly cultivated the rich soil, and wild beasts from the desert farther south supplied the Roman arena.

The western provinces of Rome were also very prolific. Spain was the richest province. Her mines yielded fabulous amounts of gold and silver, as they had previously done for the Phoenicians and Carthaginians, besides large quantities of iron and copper. Spain also produced an abundance of wool of a superior quality, besides wheat, oil, fruit, honey, wine, dyes, pitch, salt and horses. From

Roman Com-
merce in the
Eastern
Provinces

Western
Commerce of
Rome

France came wine, oil, wheat, millet, honey and cattle. The rivers of France flowed chiefly in the direction which aided in transporting products to Rome, and these, supplemented by the excellent highways built by the Romans, facilitated commerce. Marseilles was then, as it is now, the principal port of shipment from southern France. The products of the British isles were conveyed to Rome partly by ships which rounded Gibraltar and partly by overland routes through France. These products consisted of tin and iron, cattle, leather, pearls, oysters, slaves, jet, and far-famed hunting dogs. The mountaineers of northern Italy and the Alps sent resin, pitch, honey and wax, while Sicily on the south sent cattle, wool, honey, wine and valuable cloths, made chiefly at Malta, whose weavers were far-famed for their skill.

In commenting upon the commerce of Ancient Rome we must remember that nearly all of the labor of the Empire was performed by slaves. It had been the custom from remote antiquity for the conqueror in war to carry off those whom he had spared, and compel them to cultivate his fields and otherwise serve him

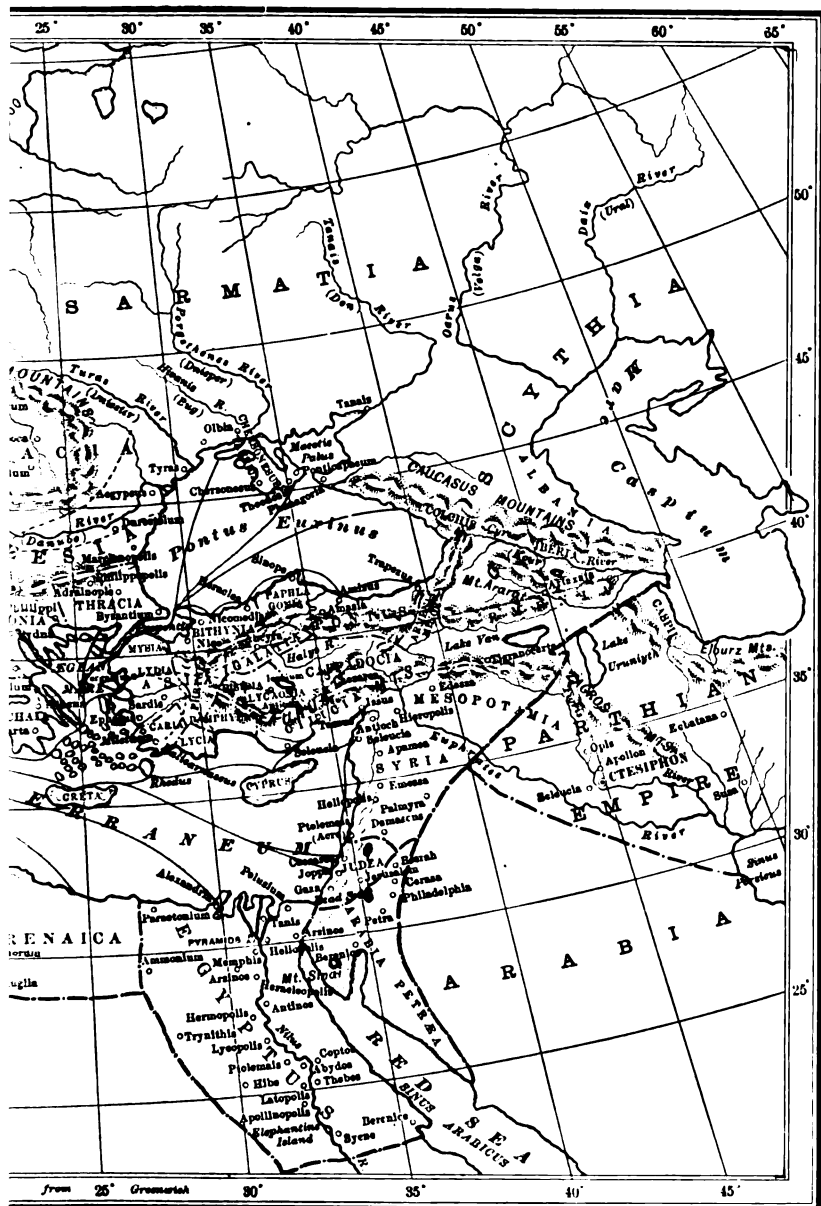
as slaves. Many ancient wars were instigated and conducted for the purpose of supplying the demand for labor. Rome was no exception to this rule. Livy and Plutarch tell us that when Sicily and Greece were subjugated by Rome portions of them were depopulated. At the conquest of Epirus by the Roman general, Paulus Aemilius, 150,000 persons were either murdered or carried away into slavery, and at the destruction of Carthage 50,000 persons were carried into Roman slavery. At the taking of Thebes large numbers were thus disposed of, and these not the lower but of the well-to-do and respectable classes. To these slaves the laws of Rome were villainously unjust. A slave could be murdered on the slightest provocation, or forced into the arena to contend with wild beasts for the entertainment of the people. One statute provided that in case a slave owner was murdered,

**Roman
Slavery**

not only all of the slaves within his house, but even those within a circle supposed to be measured by the reach of his voice, should be put to death. Such laws show the small value placed upon the lives of these unfortunates, and the facility with which they could be replaced. The great number of slaves necessitated a vast military system to control them. Now and then they arose in insurrection, but usually paid the severest penalty as a result. All kinds of labor were assigned to the slaves and regarded as contemptible by the Romans. Slaves tilled the soil, rowed the galleys and performed the work of manufactures. The carpenters, masons, weavers, and, to a considerable extent, the copyists of books were slaves. Rich men owned large numbers of them, the price of a slave being, in the public market, only equivalent to \$25 of our currency. Slave labor was actually cheaper than animal labor, so that much of the work which we assign to horses and cattle was performed by men. The result of this was to debase labor and destroy that class of intelligent, sturdy and independent workmen and artisans in which the strength of a nation chiefly rests. Although commerce flourished for a time under the Roman empire, it had beneath it this system of injustice and inhumanity, and could not be permanent. It flourished principally because of the vigorous system of government established by the Romans, better roads and means of intercourse between different countries and provinces, and better protection against pirates. Thus we see the influence of government upon commerce.









CHAPTER III.

MEDIEVAL COMMERCE.

DECLINE AND FALL OF ROME; DECAY OF COMMERCE; CONFUSION
AND IGNORANCE; CHARLEMAGNE; VENETIAN COMMERCE.

About the middle of the fourth century the Roman power began to decline. It had held unbounded sway over an immense empire for five hundred years, and had created a high degree of civilization and an extensive commerce among all of its diversified provinces, but riches finally brought luxury and corruption, internal dissensions weakened the state, and wars, with bad government, destroyed, in a large measure, the commerce of the empire. Excessive taxation and extortion seriously crippled the prosperity of the provinces. Thus Brutus made Asia Minor pay five years' tribute at once, and shortly after Anthony compelled it to do the same thing again. To bolster up the failing revenues of the state and supply needed money for the extravagance and profligacy of Rome, the coinage was debased by reducing its weight and increasing the alloy. Thus under Vespasian the silver coin consisted of one-fourth copper and three-fourths pure silver. This was later reduced to one-third copper and two-thirds silver, then to one-half copper, and finally the coin of the realm contained but about one per cent. of silver, tin being substituted. From such debasement of the coin it was only a short step to the repudiation of debts, and this step was often attempted by the demagogues. Law ceased to have any value. A suitor must deposit a bribe before a trial could be had. The increase of immorality proceeded. The virtues which had adorned the earlier history of Rome disappeared, and in the end were replaced by crimes such as the world had never before witnessed.

To the north of the Roman Empire, occupying what is now France, Austria, Germany and Russia, had grown up powerful, semi-barbarous tribes of sturdy hunters and warriors. These "barbarians," as they are called, were of immense stature, dressed mostly in skins, were well mounted on a superior breed of horses, and used the customary shields, helmets and other implements of war. They had some semblance of laws, but paid no taxes, and their civilization and commerce were of the rudest character. These rugged tribes, known as the Goths, Vandals, Franks, and by other names, had given the Romans trouble along the border all through the second and third centuries, and frequent expeditions had been sent out to quiet or subdue them. They had been students of Roman discipline and methods of warfare, and some of them had even enlisted in the Roman army for this purpose, and thus, as the power and internal strength and prosperity of Rome began to decline, these hardy peoples, which had not been enervated by luxury, were in a condition to dispute Roman supremacy. The Roman Empire had been divided in the year 364 into two parts, with two capitals, viz.: Rome and Constantinople, and this separation divided its strength and made it all the more liable to defeat.

Now it happened about this time, viz., the fourth century, that vast hordes of Huns and other tribes from the northern parts of Asia, now Siberia, swept over into Europe, driving the Goths and other European tribes before them and stirring up general confusion. The reason for this migration of the Huns is supposed to have been a gradual upheaval of the plains of Siberia, which geologists tell us actually occurred, thereby causing the rivers to run dry, and forcing the Huns to move westward with their herds and flocks in search of better pastures. A large number of the Goths were forced over the Danube and settled within the boundaries of the Roman Empire. They had their own king,

Inroads of the
Barbarians

The Fall of
Rome

and this led to a conflict with Rome, the result of which was that Alaric, king of the Goths, in 410 penetrated into Italy and marched, despite all oppositions, to the very gates of the Eternal City. It had been over six hundred years since Rome had felt the presence of a foreign enemy at her door, and that was Hannibal, the Carthaginian. Alaric laid siege, captured and sacked the city. His successor made inroads into what is now France and Spain, and set up a Gothic kingdom there, while other tribes made similar incursions into Greece, and at the same time, too, still other Teutonic tribes, the Angles and the Saxons, were settling in Britain and laying the foundation for an Anglo-Saxon civilization. Later the Saracens conquered the eastern and African provinces of Rome and established themselves in Spain, where they remained for several centuries.

These great waves of migration which passed over Europe destroyed for a time the old civilization and the old commerce. All was chaos and disorder, and the night of ignorance and superstition prevailed. The semi-barbarous immigrants were content with the simplest necessities and the products of the soil. There was no demand for foreign wares or costly articles of luxury such as the Roman world had used. The active powers of man were devoted to war, strife and destruction rather than the arts of peace. The hordes of barbarians overturned and almost annihilated every monument of science and art which then existed. The progress of literature was arrested, and so great was the general ignorance which prevailed that persons of the most distinguished rank could neither read nor write. Many charters granted by kings and others in high authority during this period have been preserved, to which it appears they were unable to subscribe their names, and then originated the custom for those who could not write to make the sign of the cross—a custom held to the present time, but seldom used in this enlightened day.

Confusion and
Ignorance

It was impossible in the four or five centuries after the fall

of Rome to carry on agriculture or other industries with any degree of success. The bare necessities were the sole aim of a great majority of the people. Internal trade was hardly more successful than agriculture, and for the same reason. For several centuries there is no trace of any important manufact-

**Decay of
Commerce**

ures except of course those domestic arts of weaving and spinning, which are absolutely necessary for providing clothes, and which can be practiced by separate individuals in every village or household. Rich men, indeed, used to keep artisans in their households as servants; but this only shows that there were no recognized seats of manufacture from which they could easily procure what they wanted. Even kings in the ninth century had their clothes made by the women upon their farms. No doubt the villages had their smiths and weavers, but these occupations belonged to a few isolated individuals, and had not yet developed to any considerable branch of industry. Trade between various localities was very limited, for the general insecurity of the times made mercantile traffic highly dangerous. The want of means of communication and transportation prevented men from easily moving about to supply one another's wants, and at the same time made it difficult for them to ascertain what others' wants were. Robbery and violence were frequent, and robbery by extortionate tolls still more so. The ordinary knight of those times was nothing more nor less than a bandit, perhaps not always as openly criminal as a highwayman, but very often employing the same methods. Since but few could read or write, the gates to the temple of knowledge were shut to the great body of the people, and they did not even surmise that they had any right to explore its treasures. Few books were written, and there are few inventions, useful or ornamental to society, of which this long period of nearly five centuries can boast.

About the year 800, Karl the Great, otherwise known in

history as Charlemagne, was made king of the Franks, and under his wise and vigorous rule learning, industry and commerce revived; towns and cities sprang up and manufactures increased, thus laying the foundation for the revival of internal and foreign commerce which was destined to set in about two centuries later. Charlemagne gave every freeman a share in the making of the laws, and improved the administration of justice. He fostered education, by establishing schools and having the works of the ancient Roman writers transcribed. Unfortunately his successors were weak and inefficient, and his death was followed by a period of great confusion, during which Europe was severely harassed on the south by the Arabs, on the east by the Slavs and on the north by the Normans.

Passing over a period of perhaps two centuries after the reign of Charlemagne, in which there were some occasional indications of the dawn of a brighter era, the inhabitants of

Revival of Learning and Commerce Europe finally began, about the eleventh century, to experience a change auspicious of better times.

The art of making paper in the manner now become universal was invented, and greatly increased the number of manuscripts and the general diffusion of learning. This, followed by the discovery of the art of printing, brought the price of books within the reach of those of moderate means. Then came the discovery of the mariner's compass, making it possible to extend navigation which had hitherto been confined to the coast and the Mediterranean Sea, over the ocean, leading to new and rich discoveries, and preparing the way for the commerce of the future. The Feudal system* had been established after the

*The Feudal system was a combination of Roman and German laws and customs involving the tenure or ownership of land and military service to the lords or the king. After the conquest of the Roman provinces in France and Germany the land was generally divided by the conquerors into three portions: the king took one; another he divided among his generals and soldiers under the condition of military service; the third was left to the

reign of Charlemagne, and this favored the growth of towns and consequently an increase in industry and commerce by the stability which it gave to property and society in general. Trade guilds and craft guilds were organized, suggesting the idea of mutual help and co-operation. Trade guilds embodied the idea of our modern chambers of commerce, and exerted considerable influence upon the government of the town. Craft guilds aimed to secure good handiwork on the part of members, to regulate the number of apprentices and to provide a common fund in case of sickness, very much after the plan of labor unions in our day. While the introduction of the Feudal system was an aid to commerce by settling society into a more stable and organized form, it finally became a hinderance on account of the restrictions which it imposed upon both property and persons. The service exacted of vassals often interfered with their employment by calling them away from agriculture or other occupations at times when they were needed. The lords levied heavy assessments and fines upon those who were dependent upon them for every attempted change of occupation, so that those who desired to give up agriculture and become artisans or traders were hampered in their efforts. Jealousies and rivalries between the lords of different territories caused taxes to be laid upon the commerce between one domain and

Effect of
Feudalism on
Commerce

original inhabitants upon the payment of a tax. But for the purpose of binding certain of his subjects more closely to the throne, the king granted out a part of his own land to them for life. This was called a fief; the giver was the liege lord, and the receiver was called a vassal. In the same way, those who had acquired large life estates as fiefs, sub-let to those less fortunate, portions of their estates and thus had vassals of their own. Bishops gave fiefs to knights for services in defending convents, and thus society was bound together by a system of service and obligations for mutual protection and defense. Gradually the more powerful oppressed those under them until the class which cultivated the soil became hereditary serfs attached to the land, and in reality slaves. The Feudal system, while affording the benefits of protection to property, was a great hinderance to freedom of both person and property, since under it land could not be conveyed, nor serfs transferred readily.

another, and thus the system eventually proved to be restrictive and injurious to the development of trade and commerce.

About the twelfth century a number of Italian cities came into prominence on account of the trade and manufactures which they had built up. Among these Venice, situated on a group of sandy and barren islands in the Adriatic Sea, whither its inhabitants had been driven by the armies of Attila, was the most

important. The wealth of Venice was originally due to two articles of commerce, viz., salt and fish, these being the only products obtainable on account of

the location of the city. The Venetians built up a large trade with mainland cities, and eventually embarked in the carrying trade. Their ships went up and down the coast, as far east as Greece and west to Spain. Salt and fish were exchanged with other cities for oil, wine, lumber and metals. Extending her commerce, Venice brought the products of Egypt and the East to her wharves, and the city soon became the emporium of southern Europe. Her ships now touched every shore and part of the then civilized world, and her commerce included every article of value. To protect her ships from robbers and pirates she built an extensive navy, and each fleet of ships was convoyed by a man of war. Her merchant squadrons numbered in all over 3,000 ships, and made regular sailings. Besides her maritime commerce, Venice built up a large overland trade with Germany and central European points.

By her extensive trade and navigation Venice raised herself to a degree of prosperity and magnificence which recalls the memory of the most flourishing period of ancient Greece. She

established a republican form of government, built gorgeous palaces (that of the Doge or Governor), magnificent churches (the Cathedral of St. Mark), and splendid squares (that of St. Mark), and made the city the wonder of the world. The Venetians supplied salt and fish to nearly the whole world, a trade in which they had

**Commerce of
Venice**

**Manufactures
of Venice**

a complete monopoly; and in every instance where a treaty was made with a foreign power a clause was introduced reserving to Venice the exclusive privilege of supplying these commodities. Besides its enormous trade, Venice engaged extensively in manufacturing, and exported its wares to all parts of Europe and Asia. Silk was one of the most valuable products of its artisans, the art of weaving this into beautiful tissues having been learned from the Persians. Another product was glass, which they made from the sand of their own islands in such a high degree of skill that Venetian glass became celebrated everywhere for its clearness and beauty. This art the Venetians had learned from the Arabs, and, with the decorative art and skill which they possessed, were able to produce glass work of rare beauty. They also made woolen and cotton cloths from the raw products which they imported from Spain, Greece and Egypt, and carried on extensive manufactures in brass and iron, so that their shields and armors were the most beautiful and excellent in Europe. The Venetians kept constantly developing their shipping facilities. They made extensive improvements in the methods of marine and naval construction, established arsenals and eventually acquired naval supremacy.

But this energetic and progressive people seemed possessed of a natural faculty for finance and commerce. They were natural born traders and financiers. A great feature of the wealth of the city was its banking facilities. The bank of Venice, established in 1171, was the first regularly organized bank in the world, although it did not develop all of the functions of a modern bank until long after. The republic, being hard pressed for money, on three different occasions was obliged to levy forced contributions upon the citizens, and in return gave them perpetual annuities at certain rates per annum on the amount loaned. The offices for the payment of these annuities were consolidated and became the Bank of Venice. The annuities or interest on the govern-

**The Bank of
Venice**

ment loans being punctually paid, the amount of the loan as registered upon the books of the bank came to be considered as a species of property and passed from one person to another by devise, descent and assignment. Debts were frequently paid in this manner, and by allowing the mutual cancellation of debts by the transfer of credits on the books of the bank, the use of money was at first saved to a considerable extent, and later certificates, payable to bearer, the equivalent of bank bills, were used to obviate the necessity for entries upon the books.

The "Rialto" was their great commercial exchange where the merchants met and did their trading. The transactions of this exchange had a wider influence on the commerce of the world at that time than any other market. The Venetians were the first to reduce finance to a science. They were the origin-

**Venetian Skill
and Learning**

ators of the system of double entry book-keeping, which we use with modifications to this day. They are credited by some authorities with having a knowledge of printing prior to Coster and Gutenberg (A.D.1440), having (as has been asserted) received it from the Chinese, by whom the art had been practiced for two thousand years. We know that Venice took the lead of all Europe in the manufacture of books and that newspapers were first issued by them, thus indicating that Italy stood in the van of progress and enlightenment at the close of the fifteenth century.

CHAPTER IV.

MEDIEVAL COMMERCE—Continued.

DECLINE OF VENICE; COMMERCE OF GENOA, FLORENCE AND PISA—EFFECT OF DISCOVERY OF AMERICA.

Besides Venice there were several Italian cities which achieved great renown in commerce, art and learning during the middle ages. These were Genoa, Florence, Pisa and Milan.

The Decline of Venice They followed Venetian methods to a considerable degree and seemed possessed in a measure of the Venetian character for commerce and finance.

Rivalries sprang up and wars between Venice and these cities were frequent and bitter. Genoa was an inveterate enemy of Venice and their conflicts at times remind one of the Punic Wars waged between Rome and Carthage. Venice may be said to have reached the period of its greatest wealth and power about the fourteenth century. Then, by gradual steps, the original, democratic constitution of the Republic was changed into an oppressive, hereditary aristocracy and the power of the state vested in a few noble families. Venice was governed with dictatorial power; a state Inquisition with subterranean dungeons and racks was established, and every act of the people was watched, every word listened to. Along with this, luxury and wealth had brought corruption in office, and the moral tone of the people declined, thus sowing the seeds of national weakness and decay. Two other circumstances contributed directly and powerfully to the decline of Venice. The first of these was the continued successes of the Turks in the East, by which Venice was robbed of the commercial advantages which she had so long and profitably enjoyed, together with the loss of the island of Crete, one of her richest colonies; and the other was the discovery of the sea route

to India by way of the Cape of Good Hope. These diverted a considerable portion of the commerce of Western Europe from its former channels through the Mediterranean, and thus reduced the commerce of Venice accordingly.

Genoa was the proud rival of Venice. Founded by the Romans before the Christian era, Genoa flourished as a commercial emporium from the beginning. It had a spacious harbor, from which it sent timber, wool and earthenware to other parts of Italy in exchange for wine and oil. After the fall of the Roman Empire, Genoa set up a republican form of govern-

**Commerce of
Genoa**

ment and in the tenth century built a navy with which it began to reach out for a share of the Mediterranean commerce. It established a prosperous trade with Sicily, the north coast of Africa, and the southern coast of France. The islands of Corsica and Capraja became Genoese colonies, and an overland trade was established with Flanders and Germany. Like the other Italian cities Genoa profited by the Crusades, for in return for the help rendered by it to the crusaders the republic was granted a strip of Phœnician territory and various privileges of trade in Syria, which gave it a valuable portion of eastern trade, and enabled the republic to eventually get a firm foothold in Greece and Asia Minor. With a flourishing commerce, the harbor of Genoa was constantly filled with a forest of masts; her commercial exchanges were only second to the Rialto of Venice in size and importance and her marble palaces gave evidence of her increasing wealth. The growth of Genoese commerce and influence aroused the jealousies of the other republics of northern Italy, especially Venice and Pisa, and they sought by every means in their power to limit her ambition. From the eleventh to the end of the fourteenth century Genoa was almost constantly at war with Venice, thus wasting the possibilities of both republics in domestic broils and interminable rivalries. They first came into serious conflict when the merchants of Genoa attempted

to obtain a share of the trade of the Grecian Archipelago and Black Sea Ports. Finally in the latter part of the thirteenth century the Genoese triumphed over the Venetian fleet, and in the treaty of peace which followed Venice surrendered to Genoa her commerce in the Black Sea, and her colonies and agencies which had been planted there.

Genoa possessed but few industries of her own, her commerce consisting chiefly of the exchange of the productions of the East with those of the West, taking chiefly cloths and pottery from France and linen and leather from Germany to the east, and bringing from the Black Sea and other eastern ports fine cloths, spices, silks and ivory. However, near the close of the twelfth century, the Genoese had plundered two Moorish cities in Spain, from which they derived the art of silk manufacture, and so successful did the industry prove, that silk became a staple manufacture among all the Lombard republics, and the cultivation of mulberry trees was enforced by their laws. Woolen goods were also manufactured by the Genoese to a considerable extent.

Usury, or lending money on interest, was regarded as a crime by the theologians of the middle ages. This strange prejudice against one of the most useful and legitimate branches of business continued for hundreds of years, and although finally eradicated, had its effect upon legislation in modern times. The trade in money, and indeed a large part of the inland trade in general of the Italian cities, had fallen into the hands of the Jews, who were noted for their usury. They were not molested by the clergy, being regarded as infidels, and they had no conscientious scruples themselves against usury, since the Jewish law permitted them to charge usury against Gentiles.* The rates of interest were ten to fifteen per cent. per annum. At Verona in 1228 the rate

*Unto a stranger thou mayest lend upon usury. But unto thy brother thou shalt not lend upon usury. Deut. XXIII.

was fixed by law at twelve and one-half per cent; at Modena in 1270 it seems to have been as high as twenty per cent., and in France and England still more oppressive. The republic of Genoa, towards the end of the fourteenth century when it had grown wealthy, paid from seven to ten per cent. on its outstanding obligations. The high rate of interest generally during this period was owing partly to risks, business being hazardous on account of inefficient laws, and also to the fact that profits in business were very large. The Venetian merchants are said to have cleared never less than forty per cent. profit on their commercial transactions, and since Genoa and the other Italian cities exercised monopolies we may safely assume that their profits were enormous. In the last part of the thirteenth century the bankers in the Italian cities and those of the south of France took up the business of remitting money by means of bills of exchange, and charging interest on loans. A distinction was then made between moderate and exorbitant interest, and the utility of negotiable bills of exchange was so great that gradually the prejudice against usury (interest) wore away, and the Lombard usurers established themselves in every country.

Having finally been robbed of its Black Sea commerce by the Turks, and later defeated by the superior power of its old enemy the Venetians in other parts of the Mediterranean, the Genoese

**Discovery of
America**

turned their attention in another direction, hoping thereby to retrieve their fortunes. There were among Genoese sailors some who were acquainted with the globular form of the earth, having acquired this knowledge from the Mohammedan astronomers, and these men originated the attempt to reach India by sailing to the west. Greatest and best among them, seeking the welfare of his city and hoping that the riches of India might thus be secured, was Christopher Columbus, the son of a wool comber. He had studied the ordinary branches of arithmetic, drawing and painting, and is said to have acquired a singularly beautiful hand-

writing. After attending the university for a short time, he went to sea when fourteen years of age, and for many years was engaged in the Syrian trade and in that of other ports, later turning his attention to the construction of charts for sale, and the deeper study of geography and navigation.

The result of Columbus' discovery was to draw the attention of Europe to the westward and dispel the mystery of the open sea. Migration set in towards the western coast of Europe, and the sea route to India diverted commerce in other channels. Genoa became subject to Milan, and although it again grew prosperous, it never regained its former commercial importance.

Only second in importance to the republics of Venice and Genoa was the city of Pisa, situated in a plain between the Appenines on the east and the Tuscan Sea on the west. The founding of the city, like that of Genoa, dates back to the Roman Empire, and like all other Italian cities, Pisa suffered from the barbarian conquest; but like them, too, she secured her independence, set up a republican form of government, and rapidly sprang forward to a foremost place among the maritime states of Italy. In the eleventh century Pisa acquired the islands of Sardinia, Corsica and Elba, besides adding many important districts along the coast to its territory, with all of which it carried on a prosperous commerce. The crusades poured fresh wealth into the lap of Pisa, and in return for its help in transporting the armament to Palestine, Pisa was given extensive privileges and became one of the channels through which the produce of the east flowed in upon the ruder nations of western Europe. Pisa reached the zenith of its power at about the end of the eleventh century. Its prosperity was marked by public edifices which stand as monuments to Pisan greatness to this day. Pisa was the first Italian city which took pride in architecture, and its leaning tower and cathedral are examples of skill and beauty. It was in this cathedral that the illustrious philosopher, Galileo, watched the

swinging of the chandelier, and observing that its vibrations, large and small, were made in equal times, "left the house of God, his prayers unsaid, but the pendulum clock invented."

**Architecture
and Learning**

The Pisans are also credited with being the first to codify and promulgate a system of maritime law suited to the extensive Mediterranean commerce, defining the rights of neutral and belligerent vessels, and thus laying the foundation for a portion, at least, of the international law of modern times. In the course of time Pisa succumbed to the wars and competition of rival cities. Genoa was its most bitter enemy, and in one fatal battle off the Island of Meloria, in 1284, the entire Pisan navy was destroyed. Torn by dissensions, and stripped of her commerce and colonies, Pisa was finally sold in 1406 to Florence for 400,000 florins, and became a port for the commerce of that city.

Situated above Pisa, on the River Arno, and being without shipping facilities, the success and commercial importance of Florence were achieved in the direction of manufacturing, finance, literature and art, rather than maritime trade. Her weavers and goldsmiths were famed all over Europe for their fine products, and her silk and woollen cloths and articles of jewelry were exported to all the principal cities of the western world. Like the other Italian cities, Florence was vexed and retarded by internal revolutions and external strifes. In the latter part of the thirteenth century a republican form of government was established, which continued in modified forms for several hundred years. Notwithstanding the wars and strifes in which Florence engaged in common with her sister republics, her growth in wealth and population continued without abatement, until at one time she was not only the capital of Tuscany, but the chief city of all Italy.

In the fifteenth century the great family of Medici, Florentine bankers, succeeded in obtaining control of the government

of Florence and changing it from a republic to an hereditary aristocracy, but while this was a blow to popular government, yet the remarkable character of the Medicis and their vigorous and enlightened rule were by no means discouraging to the commercial and artistic progress of the city. Indeed it was under the

**Florence under
the House of
Medici**

Medicis that Florence achieved its greatest glory. This celebrated family of bankers was founded by Giovanni de Medici, a merchant and afterwards a banker, about the middle of the fifteenth century, but the greatest of the family were Cosmos and Lorenzo, sons of Giovanni. The latter, surnamed the "Magnificent," so governed Florence that all Europe was filled with his fame. Richest of Italians that he was, he lavished his wealth on palaces, churches, hospitals and libraries. He made Florence the seat of every art and science and a seminary for all Europe. His court was ornamented with artists, poets and writers. Learned men from Greece and other portions of the East, who were flying from the sword of the Turks, taught the Greek language and literature in Florence; and under his rule, sculpture, painting and music began to unfold their choicest blossoms. Florence was called "The Athens of the West," and to this period of its history we are indebted for the names of Michael Angelo the sculptor, Dante the poet, Machiavelli the statesman, and Amerigo Vespucci, the discoverer of our western hemisphere.

The banking houses of Florence were the largest and wealthiest of Europe, and through them nearly every great loan made by the kings of central and western Europe to carry on their wars was negotiated. The houses of Bardi, Pitti,

**Florentine
Bankers**

Medici and Peruzzi were the leaders in the financial world during the thirteenth and fourteenth centuries, and are said to have been "The pillars which sustained a great part of the commerce of Christendom." The customs of England were farmed to the Bardi in 1329 as a security for loans, and they probably had excellent bargains. In 1345 the

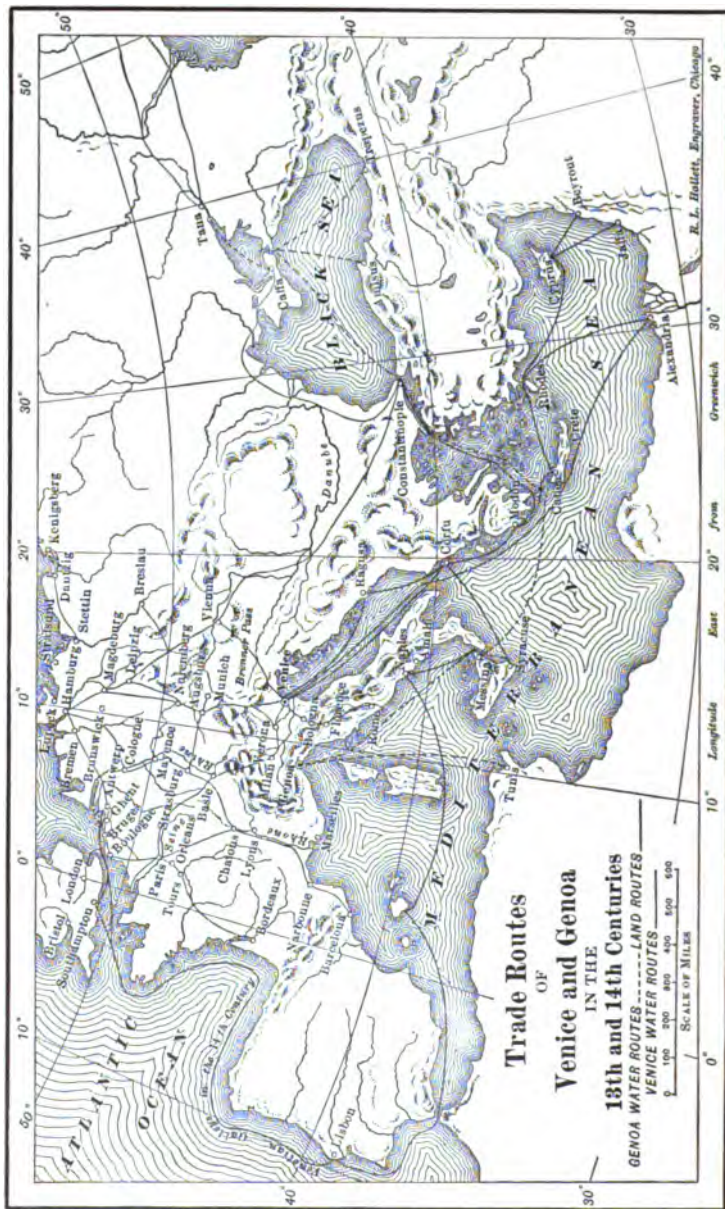
Bardi and the Peruzzi failed. Edward III of England owed the Bardi 900,000 gold florins and the Peruzzi 600,000 florins, which he was unable to pay on account of his wars with France. The king of Sicily also owed each of these houses 100,000 florins which he was unable to pay. On the other hand the Bardi had deposits belonging to citizens and merchants to the amount of 550,000 florins, and the Peruzzi were carrying deposits to the amount of 350,000 florins in gold. Unable to collect from the kings the bankers were equally unable to pay their depositors. The failure of these two banks caused great distress to the city and injury to its commercial interests.

Milan, the ancient capital of Cisalpine Gaul, and the favorite residence of the Gothic kings, is the fifth of the Italian cities which achieved commercial distinction in the middle ages.

Without a seaport, she acquired her greatness by agriculture and manufacture rather than through maritime commerce. Situated in a beautiful plain of fertile land through which coursed a tributary of the River Po, the Milanese early turned their attention to agriculture and the industrial arts. The invasion of the Huns in 899 caused the Milanese to wall in and fortify the city, and thus later it became independent of the feudal barons of northern Italy, and set up its own republican form of government. After the peace of Constance in 1184, Milan grew apace both in population and material wealth. Manufactures flourished extensively, the leading industry being the making of armor.

During her struggles with the Emperor Frederick of Germany (Frederick Red-Beard) for the preservation of Milanese independence, a powerful fraternity called the Umiliati was formed, which later became instrumental in developing the wool trade and subsequently gave the first impetus to the production of silk. From this period also date the irrigation works which render the plain about Milan a productive garden to this day. In the thirteenth century Milan was greatly retarded in her de-

Commerce of
Milan



velopment by the turmoils of the Guelphs and the Ghibelines, the partisans of first one and then the other obtaining control of the government. In the fourteenth century the

**Visconti in
Control**

great family of Giovanni Galeazzo, one of the Visconti, became sole lord of Milan, and inaugurated a remarkable career, resembling in many respects those of the Medicis in Florence. It was under him that the Cathedral of Milan was begun in 1386. It is built of marble from the quarries which Visconti gave for the purpose. The work upon this wonderful building was continued through several centuries, and finally finished under Napoleon in 1805. After many vicissitudes and strifes, Milan, in 1500, passed under control alternately of France and Spain, and finally became a part of the Kingdom of Italy. Owing to its agricultural and manufacturing interests, it suffered less than the maritime cities of Italy by the discovery of the Cape route to India.

Gradually the seat of commercial empire shifted from the Italian cities to other parts of Europe, north and west. The inventions and discoveries incident to the general intellectual

**Change of
Commercial
Centers**

awakening which set in about the fifteenth century, the invention of the art of printing, the mariner's compass, the use of gunpowder, improvements in shipbuilding and in methods of finance, commerce, and law, worked changes in the established channels of trade and developed new centers of commerce. We are now to leave the Mediterranean Sea, upon whose shores was grouped the ancient and medieval commerce and civilization of the world, and betake ourselves to other parts of Europe.

CHAPTER V.

MODERN COMMERCE.

THE CAPE ROUTE TO INDIA; PORTUGUESE COMMERCE; SPAIN'S
VAST POSSESSIONS; EXPULSION OF THE MOORS;
DUTCH COMMERCE.

Allusion has been made to the discovery of America and of the Cape Route to India, two events which occurred at the dawn of the modern era of history, and were destined to exercise a momentous influence upon the commerce of the world as well as the progress and welfare of the human race. Near the close of the fifteenth century the map of the world consisted of central and southern Europe, the north coast of Africa, and Asia as far as Persia. India and the far East was a land of mystery, while the West was a waste of waters enveloped in gloom and superstition. With the aid of the mariner's compass bold navigators had gradually ventured farther from land, and in 1431 a ship captain from Bruges had sighted the Azore Islands. The Atlantic was being gradually explored.

Dawn of a
New Era

The Portuguese were at this time an enterprising and growing commercial and maritime people and their capital, Lisbon, owing to its frontier position, had become an important distributing point for products on the western coast of Europe. In 1496 a Portuguese navigator, Vasco de Gama, steering his course southward along the shores of Africa, finally doubled the Cape of Good Hope and reached India, to return with fabulous accounts of its wealth and mysteries.

The Cape
Route to India

The importance of this discovery was enhanced by the fact that at this time the Turks, Moors and Algerians were swarming around the shores of the Mediterranean Sea, capturing

ships and caravans and destroying commerce, so that the old routes to India overland by caravans were no longer safe. Venice, owing to the decline of her commerce, was no longer able to successfully resist these inroads and attacks, and hence the new route afforded an effectual escape from this serious difficulty. Besides, an all sea route avoided the labor and damage to goods incident to handling them in changing from ship to camels or the reverse, and furthermore, by this sea route the traders were enabled to go to India and see the country for themselves, examine its products and judge of its resources and wants, instead of trading, as hitherto, chiefly through Arabian merchants. Thus we see the importance of the discovery of the new route, and its effect in diverting European commerce from Mediterranean ports, to which it only returned after the completion of the Suez Canal in our own time.

The Portuguese established colonies on the coast of Malabar and the island of Ceylon. After some conflicts with the natives on account of outrages inflicted upon them, aided by the Mohammedan merchants and even by the Venetians who sought to expel their rival from this rich field of commerce, the Portuguese succeeded in firmly establishing an extensive trade with India. By 1515 they had captured a number of cities along the coast, subjugated the spice bearing islands, and really controlled the commerce of the coast of Asia extending from the Persian Gulf to the islands of Japan. Lisbon became the seat of this extensive commerce and the distributing point for the products of India.

Early in the spring of each year a fleet of Portuguese ships set sail for India, convoyed by war ships. The route lay along the west coast of Africa; and after doubling the Cape, the trade winds assisted them in an easy and direct voyage across the Indian Ocean to the city of Goa, on the west coast, their principal port. Returning, the route was much the same, except that the fleet touched at various trading stations along the coast

**Portuguese
Trade in the
East**

of Africa, thence at St. Helena, the Cape Verde and Azore islands, and home. The voyage usually required about eighteen months for its completion, and owing to inferior ships and the imperfect knowledge of navigation which prevailed at that time, frequently resulted in the loss of a portion of the fleet. But the profits of this commerce were very large and the field of adventure enticing.

From India the Portuguese ships brought to Europe in greater abundance those products frequently mentioned heretofore as having been imported by the caravans of Arabia and Persia. From the west coast of Africa and the islands they brought ivory, gold, gum, wine, cotton, and slaves. To Lisbon came the ships of Britain, Flanders, and the Hansa towns of the North and Baltic Sea ports, to receive their cargoes for home consumption, and for a time Lisbon promised to eclipse the wealth and commercial greatness of even Venice or Genoa. Having succeeded so well in the East, the Portuguese turned their faces westward and discovered Brazil with its vast and varied wealth. But the avarice and greed of the Portuguese, their monopolistic spirit, their oppression of other merchants who were their best customers, and their generally narrow and short-sighted policy, together with their neglect to provide for the defense of their colonies and trade possessions, soon brought about their downfall. By 1580 the Portuguese commerce in the East had seriously declined, and in that year the crown was united with that of Spain under Phillip II. This union of the two countries continued until 1640, when they again separated, but since that date Portugal has been too weak and impoverished to achieve any distinction in commerce.

The Spaniards of the sixteenth century were great explorers and discoverers, but their conquests were usually inspired by an inordinate thirst for gold and not for commercial advantages. They were singularly lacking in the commercial faculty, and

despised the industries. They not only neglected and failed to build up the waning Portuguese commerce in the East, but soon became involved in a war with the Dutch, which was the means not only of destroying a considerable portion of their own and the Portuguese fleet, but also of driving the Dutch into the commerce of India which the Portuguese had once so jealously kept to themselves.

By means of discoveries in the new world, under the patronage of Ferdinand and Isabella, by Columbus, Cabot and son and Ponce de Leon, and the inhuman conquests of Mexico by Cortez, of Peru by Pizarro, and of Chili by Almagro, all of which are embraced within a period of fifty years in the last part of the fifteenth and early part of the sixteenth centuries, nearly the whole of the Western Hemisphere came under the control of Spain, and so remained for almost a hundred years. Besides crushing out in Mexico and Peru a civilization which might have instructed Spain, and practicing the most atrocious barbarities upon millions of innocent human beings for greed of gold, and in the name of religion, Spain did almost nothing towards developing the resources of this new world.

Not only did Spain possess a monopoly of the Western Hemisphere at the beginning of the sixteenth century, but also controlled a large portion of Europe, including what is now the empire of Germany, the Netherlands, Burgundy, Sicily, and Milan, Tunis and Oran, together with the Canary and Cape Verde Islands in Africa, and the Philippines and other possessions in Asia. Immense in extent and of incalculable richness as were her dominions, yet the most fertile and promising regions were despised unless they immediately gave promise of gold or silver in large quantities to satisfy Spanish greed and luxury.

Spain pursued the most selfish, narrow and short-sighted policy towards her colonies, seeming to regard them as proper

subjects to be bled and fleeced for the enrichment of the home country. She farmed the revenues to local governors, who, hav-

Spanish Colonial Policy ing paid the required sum to the crown, in turn enacted an enormous increase by oppressive taxes on the people levied in every conceivable form.

Few harbors were established, manufacturing was not only discouraged but actually forbidden, as was also the raising of all European products. Natives and Colonists were forced by every device to purchase from the mother country all manufactured articles, and her colonies were regarded as markets for the goods of the mother country. The inhuman treatment of the natives was in accord with the general spirit of Spanish colonial policy. In 1532 the silver mines of Zacatecas, Mexico, were opened, and about the same time, extensive mines in Peru. The native Indians were employed to work these mines, and were so cruelly treated that nearly all of them died, so that slaves from Africa had to be exported to fill their places. With appalling atrocity the Spaniards proceeded to confiscate the lands and goods of the natives and inflict upon them every form of cruelty and oppression.

The same year in which Columbus discovered America witnessed one of the most melancholy events in Spanish history, and one which seriously affected the prosperity of the country—the expulsion of the Moors. When the Moorish kingdom of Grenada, after a war of ten years, fell before the soldiers of Ferdinand and Isabella, the Mohammedans were allowed no alternative but to leave their country or embrace Christianity. Many chose the former course, while others, with inward repugnance, yielded obedience, but were driven by the cruelty of the inquisition to repeated rebellion, by which their condition was always rendered worse than before.

Expulsion of the Moors

They were finally commanded to renounce even their language, dress and customs, and 800,000 Moors, men and women, old men and children, left the land of their birth, their

blooming fields and the houses they had built, and where their ancestors had lived for eight hundred years. The flourishing plains of the south of Spain soon became a desert, agriculture decayed and trade stagnated; prosperous villages were reduced to ruins, towns once animated by commerce became depopulated, poverty, dirt and sloth took possession of the once rich and happy country, the departed splendor of which is still attested by such magnificent ruins as the Alhambra.

A fate similar to that of the Moors was visited upon the Jews*, while priests and courtiers divided the treasures of the banished. The Jews were the most diligent and skillful workmen in Spain, and their banishment, together with that of the Moors, left the country impoverished in every branch of trade and industry. The Spaniards were unable to supply the articles

**Decay of the
Industries**

which the silver of Peru would purchase, and hence the Spanish gold and silver which flowed in from their conquests and discoveries went to the markets of the Netherlands and England, there to be exchanged for linen and woollen cloth, manufactured metals, English woollen fabrics, and timber for ship-building. English, Dutch and German merchants brought the articles which Spain needed, and carried home in return gold, silver, pearls and wine.

Now observe how this fortunate condition of affairs, this profitable trade with England and other northern countries, was interfered with and broken up by Spain herself. During the sixteenth century religious zeal and fanaticism were very active in Spain, and the Inquisition spread terror to all heretics. Philip II conceived an ambition to invade England, dethrone Elizabeth, and restore the Catholic religion which had been abolished by Elizabeth's father and predecessor, Henry VIII. For this purpose, in 1588, he fitted out the greatest fleet of the century, and gave it the boastful name of the "Invincible Ar-

*In the spring of 1492 the Jews, to the number of one hundred and sixty thousand, according to Prescott, were expelled from the kingdom.

mada." With this he attacked the English squadron off the south coast of England, resulting in the loss by destruction and capture of the entire Spanish fleet. This conflict destroyed the

At War with
the English
and Dutch

commerce between Spain and England, and the latter began to make preparations at once to embark in American commerce and colonization on her own account, with the result that the first permanent English colony was planted in Virginia nineteen years later. From that date Spanish interests in the western world began to decline. Her colonies revolted early in the nineteenth century and several of them acquired their independence.* Cuba in 1868 attempted to throw off the yoke of Spanish oppression, but failed. In 1895 another attempt was made, resulting in a bloody war of nearly five years, during which the American warship, *Maine*, was blown up in Havana harbor. This overt act gave the United States the desired opportunity to assist the Cubans, and led to the Spanish-American war which freed Cuba in 1899, and resulted in Porto Rico and the Philippine Islands being ceded to the United States. Now only the Canary Islands and two small provinces of doubtful value on the west coast of Africa remain as the residue of Spain's vast possessions.

Equally unnecessary and unwise was the breach between Spain and the Dutch. The Netherlands were Spanish territory, and the Dutch were Spain's best customers. Their ships were in the habit of going to Lisbon for their cargoes of eastern goods, but the fanatical Philip II undertook to force the Roman Catholic religion upon them, and at his persecutions they revolted. He then closed the port of Lisbon against their ships, and their alternative was to either give up their eastern trade or go to India for the goods themselves. They were too enterprising to do the former, and hence was begun the commerce of

*Mexico became independent in 1822; Peru, 1824; Chili, 1826; Colombia, 1820; Ecuador, 1830; Bolivia, 1825; Venezuela, 1831; Uruguay, 1825; Argentine Republic, 1810; Paraguay, 1814; Cuba, 1899; Puerto Rico and the Philippines were ceded to the United States in 1899.

the Dutch in India, while at the same time they joined their forces with England in the effort to destroy the Spanish fleet.

The commercial history of Holland rivals in interest that of Venice, and those indefatigable people achieved a commercial importance in the sixteenth and seventeenth centuries which entitles them to a prominent place in history. Their lands are below the level of the sea, on the northwest coast of Europe, and were reclaimed from the sea by building immense dykes. Year after year and generation after generation this sturdy and indomitable people fought back the sea, and the soil being but a sediment of mud, under their careful cultivation, became a

**Dutch History
and Character**

fertile garden. They were a nation of agriculturists, manufacturers and merchants. Abstemious and self-denying to a degree, they handled the products of the East as merchants, but denied themselves the use of luxuries. At the time of Philip II they had already become one of the richest and most prosperous provinces in Europe. Their thrift was unsurpassed. Their cities of Antwerp, Amsterdam and Rotterdam were the commercial centers of northern Europe. These cities had been the seat of considerable manufacturing during the middle ages. Woolen and linen goods were the chief products. The first optical instruments and the pendulum clock came from Holland. The art of printing and book-binding had been carried to a high state of perfection.

Dutch ships had, centuries before, traded at the ports along the shores of the Baltic Sea and distributed the products received from Venetian merchants. Gradually the Dutch had built up extensive fisheries, until at one time the herring fisheries of Holland gave employment to 60,000 men. In 1614 a company

**Dutch Com-
merce at Home**

was organized for the special purpose of engaging in whale fishing. At the beginning of the seventeenth century (1600) the carrying trade of Europe was practically all in the hands of the Dutch. They also possessed a monopoly of the ship building industry, and nearly every

country of Europe had its ships built in Holland. Agriculture and cattle raising flourished extensively at this time, and together with its manufacturing industries placed the country in a most prosperous condition.

Having broken off with Spain, the Dutch immediately turned their attention toward the commerce of the East. A number of merchants combined to fit out ships for the long voyage, and the venture proving highly successful, the great Dutch East

**Dutch Com-
merce in the
East**

India Company was formed in 1602, with a charter from the government. This company was the pattern of all future Dutch, French and English companies, and had authority to take possession of newly discovered land, make war or peace with the natives or other inhabitants, erect forts, establish garrisons, and appoint administrative and judicial officers. Fierce and bloody conflicts with the Portuguese in India and the far East ensued, but with the help of the natives the Dutch drove them from Malacca in 1651 and from Ceylon in 1658. Java, Bantam, Amboina, Ternate and the Banda Islands were opened up to Dutch commerce, and even a slight footing in Japan was secured. In 1660 the Dutch conquered Celebes, one of the last possessions of the unfortunate and misgoverning Portuguese. With this extensive commerce flowing directly into Holland, the Dutch grew in wealth at a wonderful pace. Amsterdam became the Venice of the North and the great banking exchange for Europe.

Having thus established a rich and successful empire in the East, whose gains provided the means for further expansion, the Dutch began to turn their attention to the Western hemisphere. They fitted out several exploring expeditions, and one of these,

**Dutch Colonies
in the West**

in charge of Hendrik Hudson, an agent of the Dutch East India Company, bent on finding a western passage to India, sailed into New York harbor in 1609 and discovered the river which bears his name. Five years later the Dutch built a fort on Manhattan Island,

which they purchased from the Indians for a sum equivalent to \$24 in our currency, and named the settlement New Amsterdam. In 1612 the Dutch took possession of a number of the West India Islands and established a colony in Guiana, South America. Their western commerce was increasing, and anticipating that it might equal or surpass their trade with the East, they formed the West India Company, which, however, proved anything but successful financially.

The colonial policy of the Dutch was of the oppressive and monopolistic character, similar in many respects to that of Portugal and Spain, and the prosperity of their colonies was not permanent. England came forward about the middle of the seventeenth century as a rival to the Dutch in foreign commerce, and passed a series of statutes in 1651 and 1660, called the Navigation Acts, aimed at Dutch commerce. These brought on a short but severe war with England, which resulted disastrously for Holland. During this conflict the English forcibly took possession of New Amsterdam and converted it into an English colony, changing the name to New York. With the progress of England and France the commercial power of Holland declined. The Norwegians competed with them in the fisheries, the Germans in the trade of central and southern Europe, and Holland became, and has since remained, secondary in point of commercial importance.

CHAPTER VI.

COMMERCE OF GERMANY.

HANSEATIC LEAGUE; EFFECT OF THIRTY YEARS' WAR; REVIVAL OF GERMAN COMMERCE; ZOLLVEREIN; PRESENT COMMERCE.

In order to better understand the commerce of Germany we must go back a little in point of time to the middle ages, and glance at the civilization and commerce which had grown up in the north of Europe. In the time of Charlemagne (768-814)

there were a number of important trading towns established, which grew into local centers of commerce. These began with Bruges in Flanders and one or two Rhine cities in the west, and were scattered through what is now Germany and Austria and along the coast of the Baltic Sea as far as Russia. Many of these towns later organized themselves into small republics, after the manner of the Italian cities, for self-protection against the territorial lords, who, under the Feudal system, ruled and plundered the country about them. Then in order to protect themselves from common enemies, such as the predatory inroads of barbarians and Turks, and the pirates which infested the seas—chiefly the Northmen who swarmed in the North and Baltic Seas—they formed themselves into one grand combine, called the Hanseatic League. They used the power thus acquired for gaining greater security for their commerce.

The commerce of Europe during the middle ages may be said to have been divided into two great dominions, viz., the commercial cities of Italy in the south of Europe and the Hansa towns in the North. The connecting links between these two commercial domains were the highways built chiefly by the Romans, and more especially

The Hanseatic
League

the rivers Rhine, Danube, Elbe and other waterways. The centers of the Hanseatic League were Lubec on the Baltic Sea, and Hamburg and Bremen on the other side of the Cimbric peninsula. Later they were joined by Brunswick, Dantzic, Munster, Magdeburg and the ancient city of Cologne. The nobles tried to obstruct the formation of this league, which was in a great measure designed to withstand their exactions, but without avail, and in 1300 there were eighty cities in the confederation, stretching from Belgium to the gulf of Finland. The towns were divided into four colleges or districts, of which Lubec, Cologne, Brunswick and Dantzic were the centers. The capital of the confederation was Lubec, and there, once in three years, meetings or congresses called "Diets" were held of delegates from all the various towns of the confederation. At these congresses the commercial interests of the various districts were discussed and ways and means provided to improve the general state of trade, chiefly by affording security to property. The highways had been infested with robbers, who plundered wagon trains of their cargoes as they proceeded through the country, or dragged innocent travelers into captivity and held them for ransom. These depredations were chiefly instigated by princes and nobles who inhabited strongly fortified castles upon almost inaccessible rocks, and lived in ease and profligacy by means of their piracy upon commerce, both land and sea. In order to resist this wholesale robbery the congress required each town to furnish its quota of men and money for the general defense and punishment of offenders both by land and sea, and in addition to this to maintain a militia of both cavalry and infantry proportionate to its size or population. These were armed with cross bows, battle axes, maces and lances. The martial spirit was kept up by reviews. In addition to the regular militia, the larger towns employed mercenary troops, the whole amounting to almost an army. Thus peace and security were secured largely through

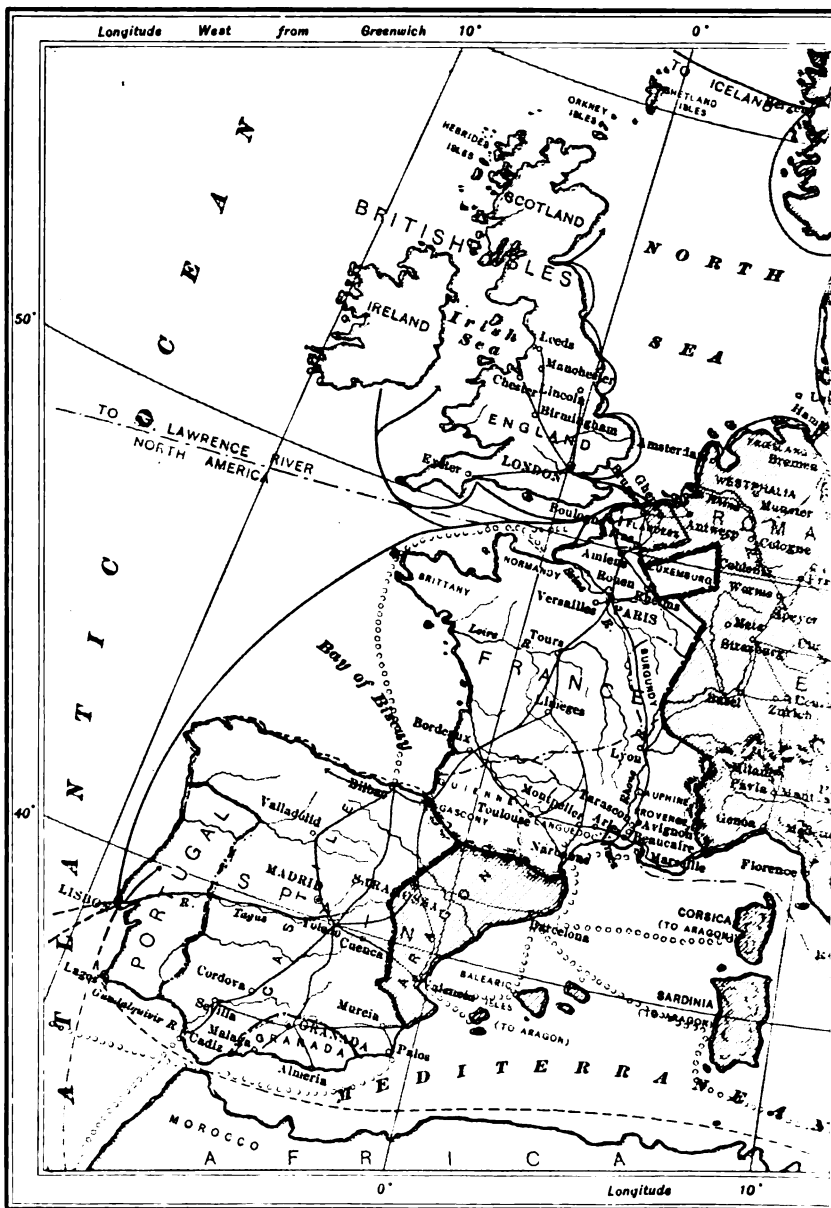
Proceedings of
the Hanseatic
Congresses

the administration of the congress at Lubec, and as a result, an astonishing success marked the history of Hansa commerce. Under direction of the congress agents were appointed in the different Hansa towns, with the special view of developing foreign commerce. Agencies were opened in new territory, and some of these afterward became permanent settlements, as London, England, and Novgorod, Russia. In order to improve the money systems prevailing, mints were established in several of the important towns, and although no uniform system of coinage was in use the coins of several towns were current throughout a large extent of territory.

The proceedings of the Hansa congress are interesting on account of it being the first purely representative body ever convened for commercial purposes, and are especially valuable as indicating the beginning of the idea of co-operation among peoples having diverse interests. There can be no doubt but these deliberations were highly beneficial in promoting civilization as well as commerce, for we find from about the middle of the fourteenth century evidence of a general improvement and a rapid increase in wealth. By this union, piracy was driven almost wholly from the North and Baltic Seas and compelled to seek its prey on the shores of France or Britain; the vehicle and caravan trade by land was protected, and a general spirit of order began to prevail throughout central Europe, affording security to property and promoting intercourse among the people, thus beginning the dawn of that intellectual and commercial awakening which was to follow the night of the dark ages of lawlessness and ignorance. The result was seen in the improvement in agriculture and manufacture all over central Europe, and even in adjoining countries. Fields were cultivated where forests stood before. Towns and villages sprang up where huts were located. People began to discard the use of the skins of bears and wolves for clothing, and to substitute woollen, cotton and silk cloth. The

Effects of the
Hanseatic
League

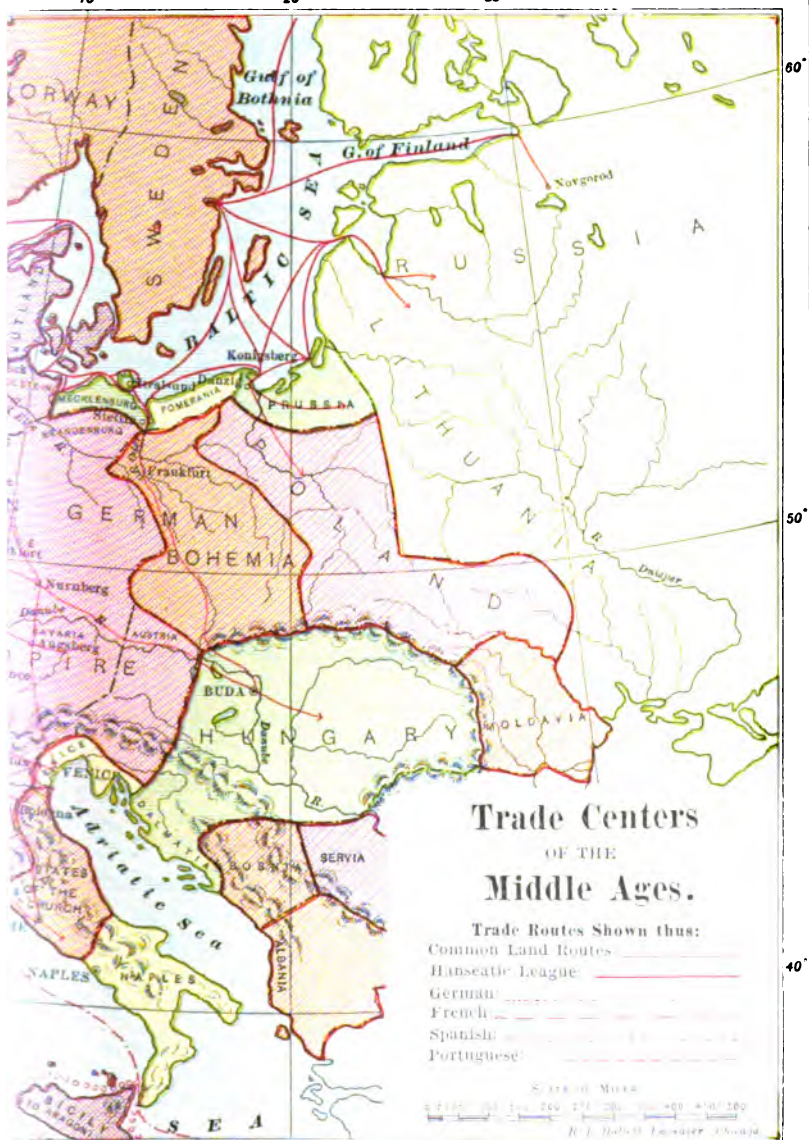




10°

20°

30°



from

20°

Greenwich

30°



League exerted its power and influence to protect shipwrecked sailors from murder, a barbarity which had been all too common before. It passed navigation laws, and improved the art of ship-building. Its good work continued until the Thirty-years' war (1619-1648) prostrated the commerce and industries of Germany, and then its functions gradually ceased, after having rendered inestimable service to the cause of commerce in mediaeval and modern Europe.

Passing over the history of Germany prior to the Thirty-years war, a history of wars, feuds, successions and religious contentions, we find the country at the close of that conflict almost depopulated in its rural districts, its commerce destroyed, its people burdened with taxes, and its territory divided into a multitude of small states. This war had been one of religion, and was characterized by all of the bitterness which usually accompanies religious disputes.

The only cities that survived the general ruin were Lubec, Hamburg and Bremen, and these had suffered severely. Seeing the decline of their commerce, these latter two cities took up new lines of trade and kept up an active commerce with western Europe, providing the whole of North Germany with foreign and colonial products, while Lubec continued to be the chief seaport of the Baltic trade. Little progress was made by Germany in commerce or the industries during the next hundred years, owing to its continual wars with France, Spain and other nations. Nearly all of the articles then considered as luxuries by the people, such as silk, glass, porcelain and gloves, were either imported from England or France or manufactured through government aid. The spinning and weaving of linen, however, was engaged in to a considerable extent, as well as the manufacture of woollen cloth. Prussia endeavored to encourage the revival of the arts and industries by importing artisans. Gradually agriculture and cattle raising increased to a considerable extent in the most fertile districts and a small export trade grew up.

About the middle of the eighteenth century (1750) commerce showed a decided awakening, and it became necessary to improve the banking and commercial facilities of the country. Banks and trading companies were organized, and roads, canals and harbors were built. Manufactures multiplied, and the volume

Revival of of the exports and imports was greatly augmented.
German The consumption of coffee, tea, rice and tobacco
Commerce largely increased, and the liberality of the German

court encouraged the importation of luxuries. Hamburg handled the bulk of the imports from England and farther countries, and Bremen wheat from France. The Rhine and the Elbe became great highways of commerce again, and the towns on their banks once more began to grow and prosper. Each city usually developed some peculiar industry. Thus Cologne monopolized the trade in Rhine wines; Leipsig the publishing and book-selling trade; Frankfort-on-the-Main was the chief financial center of North Germany. Thus we see that by the middle of the eighteenth century Germany had reached a high degree of prosperity and commercial importance. Then came the war of the American Revolution, which made a demand for German products in England, and this was followed soon after by the French Revolution and the Napoleonic wars, so that large quantities of German agriculture and manufactured products were exported and the country continued prosperous until it fell under the iron heel of the Great Napoleon.

Immediately upon the invasion and subjugation of Germany by Napoleon in 1805, he issued a decree that no more wheat should be sold or shipped to England. This lost Germany a good customer. Under Napoleonic rule (1805-1815) German ports were in a state of semi-blockade, but this was not an unmixed evil, for it caused the people to turn their attention to raising many products which they had heretofore imported. The war in America had cut off the supply of tobacco, and now its cultivation was begun and continued very successfully. Many

of the raw products heretofore imported to supply the factories of Germany and for home consumption had now to be raised at home. Flax was largely grown; beets were raised and the beet sugar industry commenced. Cotton and wool for the home mills were extensively produced, and the manufacture of cloth was given a new impetus. German mines so rich, were developed especially in iron, coal and silver, and the people learned to rely upon and develop the resources of their own country. Now that the American colonies had become independent and England no longer enjoyed a monopoly of their trade, a considerable commerce sprang up between them and Hamburg and Bremen. These cities continued to reach out after the commerce of the world with characteristic enterprise, and their ships carried on a profitable trade with the West Indies and South America.

After the abdication of Napoleon in 1815 peace returned to Europe, and German ports were thrown open to the manufactured products of England. The English had more improved machinery and were able to turn out goods at less cost than the factories of Germany. As a result English goods flooded the German markets, and for a time produced a general depression and stagnation in the industries of Germany. Hard times prevailed, the cotton, iron and steel industries especially being depressed. To remedy the difficulty, tariff laws were enacted. Germany at that time was a loose confederation of independent states, and hence there was very little uniformity in the tariff laws.

Several states would form themselves into a league and enact uniform tariff laws, then other leagues of states were formed, and finally after several years the tariff laws became uniform through the efforts of the Customs Union or Zollverein. Treaties of commerce were made by the Zollverein with England, France and other European countries, and the industries of Germany became prosperous again.

By the year 1830 the revival of trade and industries in Germany had fully set in. New machinery had replaced old methods in the silk, woollen and cotton factories, and now woollen goods formed a very important part of the export trade. Iron and steel industries sprang up, incident to the advent of the age of machinery. Glass, paper, pottery, porcelain and hardware became extensive products, as well as chemicals, dyes, sugar and beer, all of which were largely exported. After the Franco-Prussian War, the German states including Prussia were united into a compact government, and King William was crowned Emperor of Germany in the Palace at Versailles. This event brought unity to an incoherent collection of petty states, and under the skillful leadership of Prince Bismarck the new empire has steadily grown in power and influence until it now ranks as the second nation of Europe in wealth and commercial importance. Germany is rapidly changing the character of her industries and becoming a manufacturing and commercial, rather than an agricultural nation.

In the past fifty years the manufactures of Germany have nearly doubled, its commerce trebled, its shipping increased five fold, and its mining six fold. Her production of iron has increased ten fold in fifty years. Her mines give employment to over a half million men. By the use of labor-saving machines one man can now produce as much as three men could produce fifty years ago. Germany has 750 factories devoted to the making of machinery alone. One of these, the Krupp Gun Works at Essen, is the largest in the world, employing 20,000 men and covering a space of one thousand acres. Hamburg and Bremen still lead as ports of entry. Dantzic is the chief seat of its great export trade in timber, grain, flax, hemp and potatoes. Leipzig is the greatest fur market in the world, and the seat of the book publishing trade. Frankfort as a financial center has been

**Revival of
German
Commerce**

**The Present
Commerce of
Germany**

compelled to take a place second to the capital, Berlin. Dresden is noted for its porcelain and Nuremburg for its clocks and watches.

Germany has given considerable attention to the practical education of her people, especially in the field of commercial education. Her commercial success is no doubt attributable in a large degree to her system of education. Her artisans are not only skilled in their trades, but a large proportion of them are men of high scientific attainments in the branches pertaining to their work. Since the learned professions and official positions are the exclusive preserves of those born to social rank, the educated commoner must of necessity betake himself to manufacture, trade or commerce, and it follows that much of the best brains of the empire is devoted to business pursuits.

CHAPTER VII.

COMMERCE OF FRANCE.

FLEMISH COMMERCE AND MANUFACTURES; AGE OF LOUIS XIV; COLONIAL POSSESSIONS; REVOCATION OF THE EDICT OF NANTES.

Before entering directly upon the history of French commerce, let us refer briefly to a small country called Flanders, which during the middle ages existed and flourished directly north of France, upon the shore of the North Sea, occupying a portion of what is now Belgium. We have already had occasion to allude to the trading ships of Venice and Genoa and their voyages northward along the coast of France as far as Flanders. Numerous testimonies are found in history as to the flourishing condition of Flemish manufactures as early as the twelfth century. The weaving of woollen cloth was their most important industry, and a writer of the thirteenth century asserts that "all the world was clothed from English wool wrought in Flanders." This is an exaggeration, but Flemish woollens were probably sold wherever the sea or a navigable river permitted them to be carried. England and Spain furnished the raw wool and Flanders worked it up into cloth. English wool was superior to the Spanish for fine cloths, and the Spanish wool was mixed with the English in the production of medium grades of cloth. Bruges and Ghent were the two chief manufacturing and commercial centers of Flanders, and each of them at one time had not less than forty thousand looms constantly at work.

Bruges was the termination of the route down the Rhine from Italy and the East, and before Lisbon eclipsed her, through the rise of Portuguese commerce and discoveries, was the chief

distributing point whence cargoes were transhipped for the Hansa towns. Here the products of Asia and Africa, as well as Europe, came to be exchanged for the woolens, Flemish velvets, silks and linen fabrics from the looms of Growth and Decline Flanders and Netherland cities. In the latter part of the fourteenth century Bruges was a market for the traders of the world, and we are told that "merchants from seventeen different kingdoms had their settled domiciles there, besides strangers from almost unknown countries who repaired thither."

The reason for the decadence of the commerce and prosperity of Flanders may be found in a combination of causes, one of which was that England gradually established manufacturing industries of her own and began to weave not only her own cloth but that of other nations, thus depriving Flanders of her most profitable customers; another was in the rise and competition of the Hansa towns, which destroyed the monopoly of Bruges as a distributing point and commercial center; the growth of Portuguese commerce which transferred the distributing center from Bruges to Lisbon; the growth of Dutch maritime commerce directly with India, by which transshipment of cargoes no longer became necessary either at Bruges or Lisbon. What was lacking to complete the ruin of Flemish commerce and manufactures from these causes, was easily furnished near the close of the sixteenth century by the religious wars and persecutions of the weak and narrow-minded Philip II. Antwerp drew away a portion of the commerce of Bruges; many of her weavers emigrated to England, and the political control of Flanders passed to Spain, Austria and thence to France.

French commerical history may be said to begin about the period of Louis XIV (1643-1715), about the middle of the seventeenth century, for prior to that time the industries and commerce of the nation were in a very backward state. French merchants had, for a century before, been trading in a small

way along the west coast of Africa, and French colonies had been planted in Madagascar and some of the islands adjacent thereto. The French had also made some efforts to establish a footing in India, and in 1624 the great French East India Company was formed for the purpose, but later it was driven out by the English. The French do not appear to have been navigators or explorers like the Portuguese or Dutch, and except in North America were never very successful as colonizers. Internal commerce in France was likewise in a neglected and undeveloped condition prior to the advent of Louis XIV. Silk raising and weaving had been carried on to a limited extent during the sixteenth century, and the manufacture of woolen goods spread from Flanders into northern France and along the banks of the Rhine. Agriculture was very much neglected, and the peasants were unmercifully taxed to support an extravagant and dissolute nobility and maintain the succession of wars which cursed the realm. What with the Hundred-years war with England (1337 to 1453); the massacre of the Huguenots on St. Bartholomew night (Aug. 24, 1572), by which 100,000 persons were murdered in cold blood; the persecutions of the Jews, resulting in driving thousands of industrious and peaceable citizens from France, and the constant strife and commotion which prevailed, is it any wonder that commerce was at a low ebb?

The reign of Louis XIV has been called the Golden Age of France, in material prosperity as well as in art and literature. It was to France what the Elizabethan age had been to England. Louis XIV was called the Grand Monarch, and such he proved to be in many respects, displaying remarkable talents as a ruler. He surrounded himself with men who merely executed his will, and in the choice of these he showed rare ability and judgment. His ministers, especially Colbert, the great promoter of French industry, manufactures and trades, were men who surpassed the statesmen

**Early French
Commerce**

**The Age of
Louis XIV.**

of most other countries of the time. Colbert's activity was unflagging. He set himself to develop the country on every side. He especially devoted himself to building up manufactures and commerce, the construction of routes of travel by both sea and land. He revived old manufactures and introduced new ones, such as tapestries, silk mosaics, cabinet work, lace, pottery, steel work, and the like. Fine cloth had hitherto been brought from England, but by his judicious patronage its manufacture was established in France. By encouraging the growth of mulberry-trees he enabled the silk manufacturers to dispense with the importation of raw silk. The art of making plate glass was imported from Venice, and the name "French plate glass" is synonymous with excellence to this day. The art of carpet weaving he introduced from Turkey and Flanders, and in these the French soon learned to excel their masters. A machine for weaving stockings was introduced from England; tin, steel, porcelain and morocco leather, hitherto brought from foreign countries, were now manufactured in France.

The development of French colonial ambition was also due largely to the sagacity and labor of Colbert. The French had not been very successful in the East, but Colbert turned his attention to the more promising field of the western world. Before Jamestown was built or the Pilgrims landed at Plymouth Rock the French had planted feeble colonies in New Foundland (1535) and Nova Scotia (1602). This territory, called "Arcadia," was ceded to England by the treaty of Utrecht in 1713.* They also made settlements in New Brunswick (1672) and Cape Breton Island (1714), but the most important French colony was that of Canada

French
Colonial
Possessions

*On account of the disloyalty of the people to England, which amounted to openly assisting the French in the wars which occurred between the two nations, the people of Arcadia were inhumanly punished by England in 1755. Seven thousand of them were forcibly put aboard ships and transported to the English colonies, where they were scattered around. Their villages were burned and their fields destroyed.

(1608) which lay along the St. Lawrence with its post of Quebec. From this French missionaries and explorers pushed further west, and were the first white men to behold the Falls of Niagara and explore the Great Lakes. Trading posts were established by them in the region around the Great Lakes, and later these became centers and rallying points of civilization. Such were Detroit and Chicago. In 1673 Fathers Marquette and Joliet discovered the Mississippi River and sailed down it to Arkansas. Nine years later Robert de La Salle completed the work which they had begun by passing down the river to its entrance into the Gulf, and taking possession of the country on its banks and at its mouth in the name of his king, in whose honor he named it Louisiana.

It became one of the ambitions of Louis XIV to glorify his reign by creating for France a colonial dominion on the banks of the great "Father of Waters" which would rival or eclipse the flourishing colonies of England on the Atlantic coast. Accordingly several expeditions were sent out from time to time to colonize the new territory of Louisiana; the Mississippi Company was formed under the management of the visionary financial theorist, John Law. Money was lavished upon the enterprise, and emigrants were sent thither. New Orleans was founded and settlements made up the river as far as the present city of Natchez. Upon this sickly colony and previous explorations the French laid claim to the whole Mississippi Valley and the vast domain stretching away to the northwest.* But the English claimed that their possession of the Atlantic seacoast carried with it a valid title to the country in the interior for an indefinite extent westward. In conformity with this idea

*The Louisiana Territory purchased in 1803 by the United States from France extended northward to practically the boundary line of British America. This boundary was somewhat indefinite. Thence it extended westward to the territory of Oregon and took in the whole of the United States west of the Mississippi river except Texas, Washington, Oregon, California and what the United States got from Mexico by treaty and purchases.

the charters of several of the English colonies read to include territory stretching across the continent from sea to sea. This was the basis of the conflict between the English and French colonies in America. When the two nations were at peace, the controversy led only to border disputes, but when England and France were at war, their respective colonies in America also engaged in a murderous conflict, intensified and made more shocking by the Indian element enlisted in it. A plan was formed by the French to construct a line of forts stretching from Lake Erie down the Ohio River, and thence down the Mississippi to Louisiana, thus hemming in the British settlement on the east of the Alleghanys. This project soon brought on a conflict with the Ohio Company, an association formed in London and Virginia, which had obtained from the crown a large tract of land along the Ohio River, where it had erected trading posts. George Washington, then a young officer in the militia service, was sent out to warn the French away. Receiving an unsatisfactory answer, General Braddock with a body of troops was later sent out to drive them away. The story of the conflict which followed, lasting ten years (1753-1763), resulting in the campaign against Quebec and the death of Wolf on the Heights of Abraham, is familiar history. By the treaty of peace which followed the French relinquished all claims in North America except the Territory of Louisiana.*

Colbert applied himself diligently to building up manufactures at home and commerce abroad. He encouraged trade with the French colonies in Canada and the West Indies,† as well as with the Mediterranean coast and Africa. Under his influence heavy duties were imposed on imports in order to stimulate

*By the treaty of Utrecht in 1713 the French had ceded to England, New Foundland, Nova Scotia, New Brunswick and the Hudson Bay Territory.

†France acquired Gulana in 1628, colonized Guadeloupe in 1634 and Martinique in 1635. Acquired a portion of Hayti in 1697, which it held until 1797.

home productions, and bounties and subsidies were given to encourage exports. Commercial treaties were formed and trading companies organized to develop new fields of production and commerce, such as the Territory of Louisiana. The imports at the time were chiefly raw silk, wool, flax, cattle and colonial products, coffee, sugar, tobacco and spices. The exports were mostly wine, fine silk goods, and woollen cloth. But notwithstanding the efforts of Colbert and the great ability which he displayed in fostering the commercial interests of France during the reign of Louis XIV, the prosperity of the kingdom did not rest upon a stable and permanent foundation. The wars which were waged by the king for the purpose of enlarging his realm and glorifying his reign made France under Louis XIV the foremost power in Europe, but drained the country of money and men. The oppressive taxation necessary in order to carry on these wars, maintain an extravagant court and withal construct the grand palace and gardens at Versailles, which outshone all the kingly palaces of Europe, together with the religious dissensions and persecutions which stirred up the country, made commercial and industrial progress and prosperity difficult and uncertain. Had it not been for the natural productiveness of the fields and vineyards of France, and the rich territory of Alsace, Burgundy and Flanders wrung from Germany as trophies of the Thirty-years war, it is difficult to conceive how the people could have carried their burden.

One of the most serious blows to the prosperity of the people, as well as the greatest blot of shame upon the reign of Louis XIV, was his persecution of the Huguenots. He believed that the unity of the church was inseparable from a perfect monarchy, and hence began a series of oppressive proceedings against all dissenters from the established religion. Colbert, who esteemed the Huguenots as active, industrious and thrifty citizens, prevented for a

Conditions at
Home

Revocation
of the Edict
of Nantes

time these violent measures, but his influence was not sufficient to stay the hand of illtempered religious zeal. The Huguenots were excluded from office and denied many civil and political rights. The number of their churches was limited, and these were confined to a few of the principal towns; children were torn from their parents and brought up as Catholics, and finally companies of cavalry were sent among these quiet people to coerce and intimidate them. At last (1685) came the Revocation of the Edict of Nantes, taking away all rights from them. Their religious worship was forbidden, their churches were destroyed, their preachers banished and their schools closed. When the emigration from the realm became so serious as to be really alarming, it was strictly forbidden, and the shores and boundaries of France were closely guarded. But despite threats and guards, more than half a million industrious, law-abiding and wealth-producing citizens left France, carrying with them their industry and their faith. Many of them went to England, and others to Holland, carrying their silk manufacturing and stocking weaving with them. Still others settled in Switzerland and Germany, while a few found their way to America and settled in North Carolina.*

*The Edict of Nantes was a decree of toleration issued by Henry IV in 1598 guaranteeing freedom of worship and equality of rights to Protestants.

CHAPTER VIII.

COMMERCE OF FRANCE—Continued.

COLBERT; JOHN LAW; THE FRENCH REVOLUTION; NAPOLEON'S POLICY; RECENT FRENCH COMMERCE.

Louis XIV lived to see his kingdom torn and distracted, his conquests lost, a large portion of his colonies in the possession of his enemies, and a smouldering hatred for each other arise among his subjects. Monopolies were multiplied in order to meet the needs of the nobles, of whom there were one hundred and forty thousand in France at that time. Together with the clergy, they owned the best mines and farm lands; all of the large and handsome buildings, the palaces and castles and even the best of the movable property. They escaped taxation, disdained labor and eagerly seized and consumed the hard-earned products of the poor laborers. Under the wanton luxury of his successor, Louis XV, silk weaving revived somewhat, and agriculture improved, but the country was practically bankrupt. Farmers were nearly everywhere poor renters of their small holdings, weighed down by tithes and heavy taxes, while the lords lived in their castles or in the principal towns or Paris, squandering the income wrung from their miserable tenants.

Under
Louis XV.

About this time there appeared in France one John Law, a Scotchman, who offered a solution of all the country's difficulties. He proposed to liquidate the vast indebtedness with which the ambitious schemes of Louis XIV had burdened France. This was so enormous that the whole annual revenue scarcely sufficed to pay the interest. He founded a Land Bank (1716) and organized the Mississippi Company. In consideration of his liquidating the public debt, his bank was made a

state institution and authorized to issue a paper currency. He then issued inconvertible notes to the amount of the value of the land of the kingdom based upon the land itself as a supposed security. France was flooded with this inflated currency. Prices of all commodities rose, the rate of interest advanced, and stock in the bank was in great demand. Law was able to declare a bank dividend of forty per cent. payable in paper money. Seeing that Law was such a remarkable financier and his bank so prosperous, the people were eager to participate in his Mississippi scheme. The desire to purchase shares in this scheme now amounted to a frenzy. Enormous profits were expected to be realized by the Mississippi Company from its supposed gold mines yet undiscovered, and from planting and commerce. The new company grew and expanded, absorbed the East India Company, increased its capital stock to six hundred and twenty-four thousand shares of five hundred and fifty francs each, and offered to lend the government a billion six hundred million francs at three per cent. Paris was wild with excitement. The shares in the Mississippi Company rose in the market to forty times their par value. Everybody seemed to grow rich. Law worked his two schemes, the bank and the Mississippi Company, side by side, and one helped the other. Through the bank he inflated the currency, making it possible to float the Mississippi scheme, and as fast as the stock of the Company was sold, the money flowed back into the bank, enabling it to be used in making bank dividends. Government bonds, which a short time before had been selling at twenty cents on the dollar, so low was the credit of the kingdom, were redeemed by Law at par, and investors became eager to buy government securities. Land was bought and sold at fabulous prices. New issues of paper currency continued to be made until the total reached almost to the enormous sum of two thousand million francs. All the while the specie was quietly going out of France, and there was nothing but credit left as a

basis for the money circulation. Finally, after four years of financial rioting in the wildest schemes and theories, credit became strained to the breaking point. The bubble burst and a panic ensued. Law became a fugitive. Ruin and despair spread through the kingdom, and an insurrection of the common people was imminent, but with great difficulty was prevented. The terrible day of reckoning had not yet come. It is a strange coincidence that while the Mississippi scheme was in operation in France a similar gambling mania, in the form of the South Sea Bubble, held possession of England, and another of the same kind infatuated Holland. They all three collapsed about the same time and with the same effects.

After the failure of John Law's scheme, the commerce of the country was depressed and manufactures did not improve. In 1756 began the Seven-years war (1756-1763) with England, by which France lost all of her American colonies except Louisiana. The commercial supremacy of Europe, and of the world, then passed over to England. The treasury of France was empty, the country in debt, credit gone, and the people borne down with financial burdens. The new king (Louis XVI) was weak and injudicious, and the queen frivolous and extravagant. The war for American independence had been brought to a successful issue, and had aroused the spirit of popular liberty in France. Under these conditions the common people in 1789 rose in revenge for the wrongs they had suffered for centuries, and inaugurated the great French Revolution.

Peaceful commerce could not exist during a reign of anarchy. Terror made property insecure, and the wealthy fled from the country, carrying their portable wealth with them. So scarce had coin become in the first year of the Revolution, that large issues of paper were resorted to, and it was made a capital offense to refuse to receive this at par; but foreigners were not bound by the statute, and

Collapse and
Reaction

French
Revolution

took from the country all of the gold and silver that was not hoarded. The paper currency sank lower and lower in purchasing power, until a pound of butter could not be had for less than 700 or 800 francs, and a pair of boots cost as high as 10,000 francs. Internal trade and manufactures were prostrated and foreign commerce annihilated.

At this juncture Napoleon appeared upon the scene of action, and in 1806 issued what has been called his Berlin Decree, by which he hoped to destroy British commerce by sealing the ports of the entire continent against English vessels. England retaliated by capturing French ships and colonies, and thus for several years the ports of Europe dared not admit English vessels for fear of the wrath of Napoleon nor permit their own vessels to

leave their moorings for fear of British cruisers.

**Napoleon's
Policy**

The commerce of Europe as well as England was thus seriously injured, while the decree caused manufactures and home industries in France to revive, in an effort to meet the demand for goods which could not be imported. Napoleon laid down the principle that France should be self-sustaining in the production of all that was necessary for her maintenance. He increased the duties on imported goods, rigorously protected trade marks, and re-established several of the old trade corporations. To supply the loss of colonial produce, no longer obtainable from the English colonies, tobacco and corn were cultivated, and for the purpose of making sugar to take the place of cane-sugar, no longer obtainable from San Domingo on account of the negro revolution, beet-sugar was invented and the beet extensively cultivated. Cotton, linen and woolen goods were extensively produced and manufacturers were busy, but not having to compete with foreign imports clothing was neither good, cheap, nor abundant. Roasted beans were substituted for coffee, soda for potash, and bleaching, dyeing, tanning, distilling and other arts depending upon chemistry were greatly promoted by means of ingenious substitutes.

"To Napoleon is due the creation of Chambers of Commerce and Manufactures, of the Conseils de Prudhommes or mixed juries of the most skillful operators and masters for settling industrial disputes, workmen's certificates, and the institution of a property in trade marks. He constructed and repaired ten thousand miles of roads, crossing in some instances mountains by highways worthy of the Romans, built bridges and canals, and beautified Paris."

One of the beneficial effects of the Revolution was the change in the tenure of land in France. Prior to that event enormous estates were held by the nobility and aristocracy, which had descended from generation to generation without division. It was ordained that thereafter estates should be equally shared by all the children of a proprietor dying intestate. This soon resulted in dividing the soil into numerous small allotments, as it is to-day, resulting in better cultivation of the land and a more thrifty and better contented peasant class.

After the battle of Waterloo and the final abdication of Napoleon, it was hoped that France would see a return of peace and a revival of commerce, but for several years in succession her harvests were poor, taxes to defray the expenses of the previous wars continued heavy, and the country seemed politically and commercially exhausted. Its foreign trade had been so long lost that it had to be built up anew, and this proved a slow process, for other nations had secured possession of the markets. Meanwhile machinery had greatly improved in England, and its exportation being strictly prohibited by Parliament, England was able to undersell France. But the French bent their energies with vigor to the task of building up their industries, and soon so distinguished their wares by the excellence of their quality, that in ten years they were abreast of their rival, England, in many lines of manufacture and in bleaching and dyeing they far surpassed her. In 1825 the prohibition against the exporta-

From
Waterloo to
Napoleon III

tion of British machinery was repealed, and this left the French free to profit by English inventions. A general desire for industrial improvement seemed to pervade France, and capital returned to the channels of industry and commerce. Silk and cotton weaving, paper making, carpet weaving, tanning and kindred arts, all became prosperous. Agriculture, however, failed to show a corresponding degree of improvement, owing, no doubt, to adverse or indifferent legislation. Although 53 per cent. of the French people depended upon the cultivation of the soil for their subsistence, wooden plowshares, harrows with wooden teeth, and in the southern provinces, the Oriental mode of oxen treading out the grain, still remained in use up to the time of Napoleon III.

The policy of Napoleon III was favorable to agriculture and commerce. He encouraged the rearing of fine draft horses and the introduction of improved implements and methods of agriculture, thus raising the tillage of the soil to a place befitting the dignity of his empire. Unlike his predecessors, he did not

Commerce	regard the use of foreign products by his people as
under	prejudicial to home industries, but rather as a
Napoleon III	stimulus to better skill on the part of the me-
1848-1870	chanics and artisans of France. Accordingly he reduced the

duties on foreign goods and especially on foreign machinery, with a view to encouraging its importation from England and the introduction of improved processes of English manufacture. The rapid extension of the use of machinery in France under Napoleon III, the introduction of steam power and the invention of the Jacquard loom* for weaving all kinds of figured goods, gave a great impetus to the industries of the country. In ten years, 1858-1868 the exports of France increased from 1,750,000,000 francs to 3,000,000,000 francs, the effect largely of the

*Jaquard was mistreated, his looms destroyed and he finally exiled for his invention, but he lived to be regarded as the father of modern French industry.—Yeats *Vicissitudes of Commerce*.

so-called Cobden treaty with England made in 1860, which greatly reduced the duties on foreign imports.

In 1867 a grand Universal Exposition was held in Paris by which France showed to the world what excellent progress she had made in the arts of peace. The intelligence, ingenuity and enterprise of her inhabitants were here wonderfully displayed, and it was apparent that in the production of fine silk and woollen goods, wines and brandies, furniture, glass, clocks and artistic wares, as well as in art and matters of taste and education, France stood second to no nation, if indeed she did not surpass all others.

**The Universal
Exposition of
1867**

Three years after the Exposition (1870) the Franco-Prussian war broke upon the country, resulting in the defeat of her armies, the capture of the Emperor, Napoleon III, the loss of her valuable provinces of Alsace and Lorraine, and the payment to Germany of an indemnity of 5,000,000,000 francs.

Notwithstanding these disasters, the trade and industries of France quickly revived and resumed their former prosperity. The wonderful natural productivity of France again manifested itself, and the war indemnity, enormous as it was, was quickly paid. There were in 1872 more than 200,000 hand looms besides 80,000 power looms at work in France, giving rise to a secondary but very important industry in the construction of their machinery. Lyons and the south of France produced large quantities of silk goods, and woolens were woven extensively in the north, while Rheims and Amiens turned out Cashmere shawls and other textures of long-fibered wool, exceeding in beauty the famous fabrics of India. Rouen on the Seine became the seat of the cotton industry, and received the title of the "Manchester of France," while Havre at the mouth of the same river corresponded to Liverpool as the depot for the importation of raw material and the place of export for the manufactured article. Agriculture, stock raising and wine growing flourished, and glass,

**Recent French
Commerce**

porcelain, and fancy articles of jewelry and furniture were produced in considerable quantities and found a ready market. The Bank of France, established in 1803, became the great central financial agent of the country second only in consequence to the Bank of England, while the Paris Bourse took rank as one of the great Stock Exchanges of the world.

Although one of the Great Powers of Europe, France has never, since the sale of Louisiana, possessed extensive colonies. Her West Indian possessions and the settlements in Asia were too small to affect either her commerce or revenue. Algiers was acquired in 1830, but never proved remunerative to France. Several small holdings on the west coast of Africa yield valuable products in ivory, gold, oil and cotton, and recently France has acquired a footing in Indo-China from which she derives silk and rice. Colbert's East India Company planted four small settlements in Madagascar, and that island may prove a profitable holding in the future.

During the past quarter of a century, as compared with Germany and England, France has been losing ground as one of the great nations, and has failed to make the progress which her natural advantages of soil and climate should enable her to make. The upper classes are excessively fond of dress, pleasure and military glory, and, as a result, the energies of the nation have not been well directed. The national debt is the greatest, per capita, of any nation, being seventeen and one-half times as great as that of Germany, six times that of the United States and one and one-half times that of Great Britain. The bulwark of France is in the stability of her peasantry. These surpass in industry, thrift and frugality all other peoples of Europe, and if France were well governed, its prosperity would equal if not surpass its neighboring nations. Rural France is divided up into 3,500,000 small farms, a large majority of which are cultivated by the owners, thus giving a self interest and stability to the population

French
Colonial Trade

Present
Condition of
France

and to agriculture of the greatest value to the nation. Having ready markets near at hand in Paris and other large cities, a considerable portion of these farms are devoted to raising small but profitable crops, such as potatoes, fruit, poultry and the like. In 1882 the vineyards of France were ravaged by an insect, entailing a total or partial loss of over 4,000,000 acres, valued at \$1,000,000,000. The pests were finally exterminated, but the wine industry was prostrated, and since that time a large portion of the wine used in domestic consumption has been annually imported.

In 1900 the French gave another great Exposition in Paris, to exhibit at the close of the century the progress of the world in the arts and sciences. Within the palaces of that exposition were gathered the best products of the hand and brain of man from all parts of the world. It was apparent that France was abreast of the great nations in processes of manufacture, and that in articles of luxury, such as silk, glass, porcelain, jewelry, furniture and brandy, she surpassed all other nations in the artistic character of her wares.

CHAPTER IX.

COMMERCE OF ENGLAND.

BEFORE THE NORMAN CONQUEST; ENGLISH WOOL; ELIZABETH'S
POLICY; CARRYING TRADE.

While the Mediterranean was dotted with the commerce of the Phoenicians and Carthaginians, the British Isles were in a semi-barbarous state, the inhabitants living in huts and possessing the rudest implements to supply the bare necessities of life. The ancient commercial history of these islands gave no indication of the greatness which the empire of Britain was destined to achieve in the domain of commerce and manufacture in modern times. Separated from the mainland of Europe and the highways of Mediterranean civilization, the Britons remained passive, and waited at home for traders, chiefly the Phoenicians and Carthaginians, who visited their coasts, supplying them with trinkets in exchange for tin and lead ore found in abundance lying near the surface. Little progress was made in the scale of civilization until after the Roman conquest. The wealth of coal and iron stored up in these islands was unknown. Herds of wild cattle and other animals roamed through the dense forests which at that time covered most of the area. Little attention was paid to agriculture and the natives lived chiefly upon fruits and the products of hunting. The invasion of the Romans infused new life and intelligence into the people, and gave an impetus to their civilization. Thereafter hides, wool and furs are named as among their exports. English wool came to be so esteemed that merchants dealing in it were exempted from the peril of capture in war. Eventually wheat and cheese began to be regular articles of export.

Under Roman rule (B. C. 54-A. D. 455) the Britons partook to some extent of the refinement of their masters, and reached a higher state of commercial development than they again attained for several centuries. These enterprising rulers built roads, cleared forests, drained marshes, opened mines, improved agriculture, founded towns, and introduced a thorough and vigorous system of government which was of the greatest benefit to the people. Under the reign of the Roman emperor Augustus, we find that a considerable commerce had grown up, and Britain exported gold, silver, lead, tin and iron, besides considerable quantities of wheat, cattle, skins and wool. The imports were chiefly articles of luxury such as ivory, gold ornaments, amber and articles in glass.

Britain under
Roman Rule

After the decline of the Roman Empire and the withdrawal from Britain of its energizing and protecting power, came invaders from the mainland of Europe, the Saxons, Normans and Danes, who plundered the people, disturbed their institutions and ruined their commerce. Pirates ravaged the coast, and trade was checked by rapine and lawlessness, so that few foreign merchants would risk life and property for the profits of commercial intercourse with Britain. Now and then an enlightened king would endeavor to cultivate and revive commerce and the arts of peace, but the history of English commerce is almost a blank until the time of King Alfred the Great (A. D. 870). He founded a navy of war galleys, each rowed by sixty or eighty men, in order to protect his merchant ships from the depredations of pirates, encouraged trade by cultivating friendly relations with foreign countries, and sent embassies even as far as India on missions of commerce.

Saxons
Normans
Danes

During the Middle Ages, the Baltic and North Seas were infested with pirates, chiefly Northmen, who regarded the merchant ships of neighboring states as their natural plunder. This

open highway robbery on the seas was for centuries the common employment of the younger sons of the royal and noble families of Denmark, Norway and Sweden, and was considered a legitimate field in which they could win fame and fortune. During the eighth and ninth centuries the coasts of England, Scotland and France suffered severely from the ravages of these pirates, and as previously stated, one of the incentives to the formation of the Hanseatic League was the mutual protection of the towns against piracy. Furthermore, at that distant and unenlightened period, human jealousies and rivalries were stronger in many instances than the instincts of right and justice, and trading towns often regarded the seas as the domain of the strongest and committed acts against rivals which would now be regarded as piracy. Individuals undertook to enforce, on their own account, reparation for maritime wrongs, and were not particular when the real offender could not be reached in substituting another.

An important feature of the internal commerce of England, and other parts of Europe as well, during the Middle Ages, was the annual fairs which were held in the principal towns. These fairs were the means of bringing buyer and seller together, and a general interchange of commodities resulted. Owing to

**Fairs of the
Middle Ages**

the limited facilities for travel and transportation of goods, the lack of roads and vehicles, and the fact that the people traveled but little, it was a

great convenience to have a common meeting time and place, where articles of manufacture from distant parts of the country or world could be exchanged, and the wants of the people thus supplied. The location of these fairs was usually determined by the question of convenience, the size and importance of the town, or the fact that a certain point was a shrine whence came pilgrims periodically to worship. Thus Mecca continues to hold a fair, where large quantities of goods are sold annually.

The principal English fairs in the Middle Ages were: That of

London, known as St. Bartholomew's Fair, where wool and cloth were the chief articles sold. This fair was not entirely abolished until 1840. The fair at Winchester, where large quantities of wool were sold; and the great fair of Stonebridge, to which came merchants from all parts of Europe. This fair continued a month, and being near the coast was attended by "merchants of Venice and Genoa, with stores of eastern produce and their own manufactures of silks, velvets, cotton goods and glass. The Flemish brought the fine linens and cloths of Bruges, Liege, Ghent and other manufacturing towns. French and Spanish merchants came with their wines and fruits; the great traders of the Hansa brought furs and amber, iron, copper and other metals, flax, timber and grain, and all the products of the north. In the same way the English farmers, or traders acting on their behalf, carried to this fair, hundreds of huge sacks of wool for the manufacturing towns of Europe, barley for the Flemish breweries, with corn, horses, cattle, and many other goods."*

As means of transportation and travel improved these fairs gradually declined, and in the age of railroads and steamships have disappeared almost entirely as trading centers. The local store and the traveling salesman have superseded them. The principal fair in existence at the present time is that at Nijni-Novgorod in eastern Russia, which owes its existence to the primitive condition of that part of the country, and the lack of transportation.†

The Norman Conquest brought a change in dynasties in England, and with it contentions which retarded the progress of commerce. The Feudal system fettered vassals, while nobles

*Gibbins' History of Commerce.

†This fair lasts six weeks and is visited by 800,000 people from central Asia and Europe. A town of stone consisting of 5,000 shops or bazars laid out in streets has been erected for this fair. Special goods are sold in certain quarters of the town, thus in the Persian quarter carpets, rugs, shawls and silks are sold; in another tea; another, skins and furs, and in another metallic wares. The sales foot up annually about twenty million pounds sterling.

spent their time in war and the chase. "Red deer and wild swine were of higher value in the eyes of such men than the lives of Saxon Serfs." Henry I, in 1110, endeavored to encourage

Norman home manufacture by establishing a colony of
Conquest, 1066 Flemish weavers in London, and gave them many
Great Charter privileges, but displayed his characteristic igno-

rance by condemning all foreign wool to be burnt. Then came the crusades, in which the zealous Richard I took a prominent part, with the result that Eastern commodities now came more freely into western Europe. Gold, spices and frankincense from Arabia; precious stones from Egypt; purple cloth from India; palm oil from Bagdad and weapons from south Russia and the Baltic Sea were introduced into England, and trade began to show evidences of steady growth. Then came the Great Charter, wrested from the miserable King John, in which were clauses favorable to commerce, guaranteeing merchants against excessive taxation and establishing a uniform system of weights and measures throughout the kingdom. During all this time English wool was the chief basis of wealth. The considerable amount which the English exported shows its relative value to other products, and at the same time indicates the insignificance of their manufactures. Only the coarsest cloths were made at home. Most of this wool went to the looms of Flanders, where a superior quality of fabrics was made and supplied to England

English Wool and all parts of Europe. Thus England as a source
Banishment of supply for the raw product and Flanders as a
of Jews great manufacturing country were interdependent

commercially, and this tended to make them so politically, so that when Edward I, in 1297, wished to attack France, he first made sure of the friendship and support of Flanders, and later sovereigns pursued the same policy. Edward I recognized the value of commerce chiefly as a means of revenue, and for this reason aimed to foster it by opening English ports to the merchants of Germany, France, Portugal and Spain. As a further

measure for enriching his exhausted treasury and relieving himself of enormous debts, while displaying his religious intolerance and bigotry, he confiscated the property of sixteen thousand five hundred industrious Jews whom he banished from his Kingdom.*

Edward III offered special privileges to the weavers and dyers of Flanders who would settle in his realms, yet fettered the grant with absurd regulations in order to prevent his invited guests from becoming too rich. During his reign a citizen of London is said to have been executed for using coal as fuel contrary to law. The opposition to coal was based chiefly on the fact that at that time chimneys were luxuries not commonly enjoyed, and the smoke from the fires had to escape by the cracks and crevices of the houses. Glass windows were about as rare as chimneys at that period.

Edward III
1326-1377

Up to the fifteenth century England had depended almost wholly upon foreign ships to carry away her exports and bring her the products of the outside world. This carrying trade was mostly in the hands of the merchants of the Italian cities (Genoa and Venice) and the Hansa towns, whose fleets, consisting of many vessels, laden with wool, cotton, silks, velvets and spices, were eagerly looked for along the English coast. But as the English learned the advantages of manufacturing from Flanders, so they learned the art of navigation from these foreign merchantmen, and gradually began to embark in the business of foreign commerce. This was vigorously opposed by the Hansa towns, who wished to have no participators in the profits of a lucrative monopoly, and conflicts at sea were frequent and exceedingly har-

Development
of the Carrying
Trade

*This banishment occurred Nov. 1, 1290. Edward's excuse for the decree was that the Jews were clippers of the coin of the realm, but his real reason was to confiscate their property. Their banishment was a severe blow to the industrial welfare of the Kingdom. Jews were not permitted to return or re-enter England again until the time of Cromwell.

assing. But in the course of time English ships became more numerous and went farther abroad, until the Hansa found that English commerce could not be stifled, and the visits of Italian ships became less frequent and profitable, until they finally ceased in 1587. Thus about the time the New World was discovered England was expanding in its commerce and manufactures, and preparing to take its place along with Spain, Portugal and the Netherlands, as one of the leading nations. It was far behind these, however, in point of discoveries in the Western Hemisphere, but was destined at a later period to far surpass them in colonial possessions. Under Henry VII English commerce was placed upon a firm and permanent footing. Recognizing the necessity for a naval power to protect his merchant shipping, he built a fleet of war ships, called the **English Commerce established under Henry VII** Great Harry, which was the beginning of that navy which defeated the Invincible Armada in the reign of Queen Elizabeth, and has given England its supremacy on the ocean even to the present time. As soon as England was able to protect her merchant ships, piracy declined, her flag became respected and her commerce increased. Henry VII, after the discovery of the New World, empowered the Cabots to undertake voyages of discovery, and it is under the right of discoveries made by these men that England claims, at the present time, a large part of British North America.

Henry VIII abolished the monasteries and set up the Church of England. Up to that time the church owned and controlled about one-fifth of all the valuable land in the realm, and upon the dissolution of the monasteries these lands were divided and distributed, thereby greatly improving and encouraging agriculture, and this in turn tended to improve manufactures. Sheep were bred in large numbers and more wool was produced. As the natural resources of the country were developed and utilized, the means of exchange were improved and commerce extended. Indian spices,

Abolition of the Monasteries

Turkish carpets, gums, drugs and ivory were sought in the Mediterranean and Eastern ports. English ships went on voyages requiring a year or more for their completion, and London, Southampton and Bristol carried on trade with distant parts of the world in English ships.

But it was Elizabeth, the daughter and successor of Henry VIII, who promoted British commerce most effectually. This remarkable woman was ambitious that England should rival Spain as the leading power of the world, and to this end she legislated often arbitrarily, and frequently for the moment and not for time, but yet with the single purpose always in view of building up England's power and resources. During her reign agriculture and the mechanic arts underwent great improvements, and crops were at times so abundant that wheat was exported. Hemp and flax were successfully cultivated. Manufactures greatly improved, and the weaving of woolen cloth received a fresh impetus by the arrival of a large colony of weavers from the Netherlands who had been driven out by the religious persecutions of Philip II of Spain. When the Invincible Armada attacked the English navy about three hundred and fifty merchant ships were pressed into service for the defense of England, and after the contest was over many of the Spanish prizes served to swell the growing English navy. Ship-building greatly developed, and the number, size and quality of the vessels built underwent a remarkable change.

Elizabeth deprived foreign merchants of their privileges, closed the London agency of the Hansa, and finally went to the extreme length of forbidding foreign vessels to enter English harbors. She granted numerous monopolies to encourage home enterprise, and thus between the restrictions against foreign ships, and monopolies at home, the people were debarred the enjoyment of many useful commodities made abroad and compelled to pay dearly for worse

Queen
Elizabeth
1558-1603

Elizabeth's
Policy

articles made at home. Monopolies became so oppressive, and prices of iron, lead, coal, saltpeter, oil, vinegar, starch, yarn, skins, leather and glass were so exorbitant, that her subjects finally protested against the system and openly denounced the laws. The queen wisely yielded to the popular demand, thanked the House of Commons for calling her attention to the wrong, and changed her policy.

During Elizabeth's reign trade and manufactures prospered beyond all former periods in English history. The comforts of life were multiplied and the style of living among all classes greatly improved. Prior to that time the common people lived in houses with dirt floors, no pretense being made to sanitation, and the streets were so filthy that London and many other towns were annually visited during the summer months by an epidemic called the "Plague." But before the end of Elizabeth's reign much of this was changed. Houses began to be built with a view to health and comfort. Tasteful furniture came into use,

*Era of
Prosperity*

displacing the rude arrangements of former times, and wealth asserted its presence among the commercial classes as well as among royalty and nobility. The queen's example encouraged a taste for magnificence in apparel. Luxury at table likewise prevailed, and sumptuous habits spread from London to every province of the realm. The Royal Exchange, the most notable commercial emporium in England, was founded at this time and opened by the queen in person. The famous East India Company was chartered by Elizabeth in 1600, and thus was laid the foundation of the vast English empire in India which reached its fruition in the reign of Victoria. This, too, was the Golden Age of literature, and gave to the world Shakespeare, Bacon, Spenser, Ben Jonson, and a host of others who have enriched the world with productions of inestimable value.

The East India Company chartered by Elizabeth in 1600 was the beginning of the system of foreign commerce and colo-

nization which has grown to such importance in England the great manufacturing and trading country were sought in the East India Company. This was the first step which she is to-day. This was the first step which the East India Company formed in 1600, and London was given the exclusive right of trade with distant parts of the East. The Company's charter gave it the right of commerce with all the countries extending from the Cape of Good Hope eastward to the Straits of Magellan, and islands as might already be occupied by any European state." The government of the company should be in a governor and board of directors, varying at different times and under different statutes. At the same time local councils, having limited authority over particular territories, were established in Madras, Bombay and Calcutta. The original purpose of the Company was the profits of trade, but in the exercise of its functions it gradually assumed a governmental character. It began as a purely private corporation of trading merchants, free from governmental direction, but eventually was brought under a "Board of Control" appointed for India, and subjected to home supervision.

This company met with wonderful success from the first, realizing profits from its voyages and the sale of the products of India of fabulous amounts. The Portuguese and Dutch, who had previously become thoroughly established in the trade, were opposed by every possible means the encroachments of the English merchants upon Indian territory, but by winning the favor of the Mogul with bribes and presents, taking advantage of the quarrels among the petty chiefs and siding with the one most likely to be successful, the company in time gained a firm footing and established agencies and trading posts in various parts of the empire. The wealth of India was now brought into the lap of Britain by ship loads. The profits of the company became enormous. Shares of £100 rose in the market to £245, £300 and even £500. Luxurious tastes were created

Success of the
Company

action of rare commodities. Spices and jewels from
were extensively used, and rare cotton and linen fabrics
the wearing apparel of the rich. As the use of gun-
in war increased, there arose an increased demand for
which Europe could not satisfy, but the supplies from
were abundant enough to meet all needs, and the profits
large.

The success of the East India Company and the enormous
which it was realizing from its royal monopoly excited
jealousy of London merchants, with the result that a rival
company was formed which set at defiance the exclusive privi-
leges of the authorized company, and fitted out
ships for Indian trade. When caught these were
treated without mercy as pirates by the East India

Nevertheless they continued to struggle for a share
commerce, and in 1698 disputed in Parliament the
the charter of the original company. The result was,
one of the two companies under the name of the
India Company, which for a century held despotic

England's commerce in the East. During the first
seventeenth century the East India Company re-
a commercial character, but being situated far from
of the home government, beyond the watchful
of consuls and ambassadors, it became necessary that
should be able to defend itself and redress its own
as a military character was attached to trading, and
prisons were built.

to the contests between the native princes after the
dynasty fell, the French in 1750 undertook to
destroy English power in India, and well nigh
succeeded, too, but owing to the valor of Lord
Clive, formerly a clerk in the company's office at
French were defeated, the native princes made vas-
large part of Indian territory brought under English

control. From that time until Napoleon there were more or less of conflicts in India between the English and French, with odds in favor of the former. In 1767 Parliament decided to claim a share in the government of the territory thus acquired, and appointed Warren Hastings first governor-general. Under his administration and those of his successors extensive additions were made to English territory during the next fifty years. Meanwhile the power and commercial supremacy of the United East India Company declined. Its servants committed the greatest extravagances and frequently returned home to England with immense fortunes, while the company itself was frequently in financial difficulties. In 1813 Indian trade was by act of Parliament thrown open to private enterprise, and in 1833 the Company was compelled to abandon entirely its trading character. Its functions continued politically until the Great Mutiny of 1857 gave it the death blow. In 1858 Queen Victoria, by proclamation to the native chiefs and princes, took over the government of India, and in 1877 she formally assumed the title of Empress of India.

CHAPTER X.

COMMERCE OF ENGLAND—Continued.

MANUFACTURING; POSTAL SYSTEM; BANKING; SPECULATION;
COLONIAL POLICY.

From exporting her wool and importing her manufactures as England had done during the Middle Ages, she had in the seventeenth century risen to the position of a manufacturing nation, sending large quantities of cloth, metals and eastern products brought first to England, to her colonies and to the lands along the Baltic and Mediterranean. Thus we see her **England as a Manufacturing Nation. Navigation Acts** importing the products of Turkey and India or the fish of New Foundland and re-shipping them to France, Russia, Spain and Italy. Her trade in woolens with the Netherlands continued in a prosperous condition while her colonial trade developed rapidly. The carrying trade was yet largely in the hands of the Dutch, and in order to stimulate English ship-building so as to handle this trade herself, and cripple the Dutch, Cromwell in 1651 had laws enacted, called the Navigation Acts, by which vessels built in England or a British colony alone could be employed in the importation of goods into England from the three continents of Asia, Africa and America, while European merchantmen could introduce into British ports only the produce of the nations to which they belonged. English ownership of vessels engaged in foreign trade thus became a necessity, and the officers and at least two-thirds the crew were required to be native born. These laws continued in force until 1825 and no doubt gave a great impetus to shipping, enabling England to gradually obtain control of much of the carrying trade of the world, an acquisition which she has continued to hold up to the present time.

Under Cromwell's wonderful energy affairs improved. War ceased and prosperity for a time became more general than it had been for two generations before. Agriculture continued to improve and manufactures advanced. The manufacture of cotton goods had its inception about this time. A cheap and efficient

**Origin of the
Postal System** postal service was established under government control and security, thus greatly facilitating trade and industry. Prior to this time many modes of

conveying letters had been in vogue, but Cromwell, by the Act of 1656, organized a postal department of the government, appointed a postmaster-general and established a system of post-roads throughout the realm. Thereafter the occupation of carrying the mails was forbidden to private individuals. One object of the act was to discover and prevent wicked and dangerous designs against the government, by exercising a censorship over the mails. Home and foreign commerce steadily advanced. As manufacturing and ship building increased, foreign markets were sought and found for English products. The commerce of the Netherlands was now on the decline, partly owing to the persecutions of the Spanish king and partly as the effect of the Navigation Acts. Germany, another competitor of England,

**Progress of
English
Manufactures** was severely injured by the 'Thirty-years' war (1619-1648), and with these two competitors practically out of the race, English commerce went

forward with increasing vigor and facility. Immigration from the Flemish manufacturing centers was encouraged, and thousands of weavers and dyers came to England bringing their skill and sober habits, as an addition to the wealth of the realm. At about this time also, Louis XIV of France committed his egregious mistake—which cost his country so much and benefited England accordingly—of expelling the Huguenots or French Protestants, by the revocation of the Edict of Nantes (1685) and 50,000 of his most skillful artisans went over to England, carrying with them an accumulated capital of not less

than £3,000,000. These gave a new impetus to the manufacturing interests of Britain, and greatly benefited, especially the silk, glass, paper and hardware trades. From the teaching of these exiles the quality of English manufactures showed a marked improvement, and tissues of silk, wool and linen soon attained a high degree of perfection. Irish linen from home grown flax attained a world wide renown from this period.

It had been customary for London merchants to deposit their funds with the mint for safe-keeping, but Charles I seized their funds as a forced loan, and thus not only destroyed the government credit but, by the same act, put an end to the custom. City goldsmiths of high repute were next entrusted

Origin of the
Banking
System

with valuable deposits, and they paid the merchants interest and issued a form of negotiable receipt, similar in effect to our bank notes. These

goldsmiths were money lenders and made advances to the government in times of need, taking as security mortgages on future revenues. They advanced to Charles II the sum of £1,300,000, at eight or ten per cent. interest, upon the security of the taxes. Charles in 1672 refused to repay the loan, saying they must be content with the interest, and this caused widespread panic and financial disaster. William Paterson, a Scotchman, then came forward and offered to provide the government with £12,000,000, to be repaid by taxes on beer and other liquors. The outgrowth of the whole matter was the establishment in 1694 of the Bank of England, an institution which has been a powerful element in the commercial progress and greatness of England, as well as a balance-wheel to the world of finance. After the great bank was established the business of banking became an avowed practice, and men who could inspire confidence by their character and wealth became bankers and found the pursuit lucrative.

At about the time John Law was promoting his Mississippi scheme of reckless speculation in France the English were launching a similar wild project of the most visionary character,

now known as the South Sea Bubble. By this scheme they proposed to pay off the national debt and all grow rich at a stroke. The shares of the East India Company were at a high premium and the Bank of England promised wonders, why not all get rich in stocks? John Blount, director of an insolvent company trading in the South Seas, from which not a penny of a dividend had been collected in ten years, persuaded an easy ministry that he could wipe out the national debt if granted an exclusive charter to the rich gold mines yet undiscovered in the lands of the South Seas and all the teeming fisheries which might exist there. Parliament made the grant, and the directors began selling stock. The premium went higher and higher until it reached more than 1,000 per cent. Rich and poor alike embarked their means in the confident assurance of making a fortune. Shrewd bankers accepted the stock as collateral for loans which ordinarily they would not have considered. Hundreds of visionary companies were formed and worthless stocks were floated to the amount of over £500,000,000—more than all the gold and silver in the world, and exceeding several times the value of the landed property of England. The bubble burst in 1720.* Bankers and goldsmiths failed, dragging down thousands with them. Many opulent families were brought to beggary and untold misery resulted among the poor. Like every other scheme the object of which is the making of something out of nothing, the South Sea Bubble exploded and left widespread ruin. So clamorous were the people for some satisfaction for their losses that Parliament was obliged to interfere, and not only distribute the meager assets of the company among its victims but punish the offenders. Several of the directors were imprisoned, and all were fined to an amount aggregating several million pounds.

**The South Sea
Bubble**

While the events previously enumerated were transpiring at

*The pin that pricked the bubble was the discovery that Sir John Blount and other promoters of the scheme had quietly disposed of their stock.

home, England was developing a colonial empire of large proportions in America. Had her statesmen pursued the same liberal and enlightened policy towards her American Colonies at that time which characterizes her present system of colonial government, she might have continued to hold and control her American possessions indefinitely, but instead she proceeded upon the false theory that her colonies were proper subjects to be governed and exploited for the benefit of the mother country—a theory which has been steadily pursued by Spain up to the present time, resulting in the loss of almost all of her colonial possessions. All imports to the colonies from any other country in Europe were forbidden in order to give English manufacturers a monopoly of the American trade. Then in 1660 an act was passed prohibiting the colonies from exporting certain enumerated articles to foreign countries without being first brought to England and there unladen and then re-shipped by English merchants. The enumerated articles were tobacco, sugar, corn, iron, molasses, ginger, cotton, indigo, coffee, skins and lumber—just the commodities which the American and West Indian colonies produced in most abundance.

The colonists were not only compelled to sell their surplus products through English merchants and send them in English vessels, but they were equally forced to buy all imported goods from England. An act was passed in 1663 prohibiting any article from being sent into the colonies except the same was sent from an English port and in an English ship. Home manufactures among the colonies were discouraged and suppressed. Woolen manufactures were forbidden in 1719 and iron in 1750. Colonial hatters were not allowed to send hats from one colony to another. Thus the colonists were hampered and forced to pay unjust tribute to home ships and merchants. This unfair and narrow-minded policy caused much discontent and irritation among the Americans, and was openly and ably opposed by an

element in Parliament headed by the great statesman William Pitt, but without result. Finally the culmination came on the celebrated occasion when the citizens of Boston emptied a ship-load of East Indian tea into their harbor, and war was openly declared and begun in 1775.

We have now reached a period in history celebrated for social, political and industrial revolutions. During the last quarter of the eighteenth century the human mind seems to have awakened to a new development and realization of its possibilities. The principles of republican government were enun-
Period of
Revolutions ciated by the American colonists in 1775, and their war of independence fought to a successful issue in 1783. The doctrine that the power of the state resided in the people and not in the sovereign was the seed which, transplanted to French soil, ripened into the great social and political revolution of France in 1789. In England during this period a mighty though silent, industrial revolution was going on, occasioned by the invention of improved machinery and the introduction of steam power. Prior to this time nearly all of the manufacturing in England, as well as other countries, had been done by hand in the homes or little shops of the workmen, aided by their families and apprentices. The methods were crude, tedious and difficult, causing manufactured goods to be both imperfect and expensive. A series of useful inventions following closely upon each other changed all this, increased the power of production in mining, manufacturing and agriculture a hundredfold or more, and made England the richest nation in the world.

Henceforth by the use of labor-saving machinery men were able to produce not only better wares and of more uniform
The Factory
System quality, but in far greater quantities in proportion to the labor employed, and hence much cheaper in cost. But in order to utilize this machinery it became necessary that workmen should congregate, and thus the introduction of machinery brought about the factory sys-

tem. Costly and intricate machines as well as buildings in which to conduct the work were necessary. This required the amassing of capital—a new feature of the industrial problem. At first factories were located near streams where water power could be obtained, but with the advent of the steam engine they could be located near towns where there was an abundant labor supply, and as the means of transportation improved, less regard need be had for the location of the raw product. The introduction of the factory system marked an era in the industrial progress of England and the world, and the bringing of workmen together and into more intimate association with each other had a radical influence upon them intellectually.

Chief among the inventions which brought about this industrial revolution was the steam engine of James Watt, who took out his patent in 1769. This was preceded in 1767 by the spinning jenny invented by James Hargreaves, whereby many threads could be spun at once instead of a single thread as heretofore, and this to be followed later with improvements in the methods of spinning and weaving wool and cotton by Arkwright, Crompton, Cartwright and others. These inventions completely revolutionized the manufacture of cotton and woolen goods, and these industries went forward with a bound. Manchester attained great importance on account of the magnitude of its factories. Liverpool, hitherto a straggling fishing town, became a leading city, importing large quantities of raw cotton and exporting the finished goods. Silk manufacture was similarly promoted. The construction of machinery necessitated the use of coal and gave a new impetus to mining, while the use of the steam engine enabled the miners to pump the water out of the mines—a thing which they had not been able to do by means of the crude hand pumps formerly used. Processes of smelting and developing ore, and the manufacture of steel were greatly improved. Birmingham and Sheffield date their vast hardware and cutlery trade from

Era of
Inventions

the invention of the puddling furnace by Cort in 1783, whereby wrought iron was produced by the use of the coal found in close proximity to both the ore and the limestone which is used as a flux. By means of this invention immense quantities of ore were utilized which would otherwise have been worthless.

Following closely upon the inventions enumerated above came the Napoleonic wars, which engaged the most of the continent and threw a large share of European commerce into English hands. At a prodigious cost immense armies were kept in the field against France, and to supply the wants of these required the employment of an industrial army at home. England had the advantage that, while being a participator in the war, her fields and cities were not devastated nor her territory invaded by the armies. Prices were high and English goods in great demand. Thus the period of war was a commercial advantage to England. Meanwhile the development of the industries resulted in a great improvement in the means of transit and commerce throughout Britain. Goods manufactured must be sold and transported, and better means of carrying were needed. Paths for pack-horses were converted into wagon and cart roads, canals were built, rivers cleared and utilized, and the way thus paved for the introduction of steam power to locomotion a little later.

After the fall of Napoleon and the restoration of peace throughout Europe in 1815, there came a period of reaction and commercial depression in England which lasted ten years. This was caused chiefly by the efforts of continental nations to revive their own shattered industries by means of severe protective tariffs, which practically shut out English manufactures. A series of bad harvests coming about the same time, together with the high taxes incident to the war, placed the country in a severe strait. The distress was aggravated by the so-called "Corn Laws," which were enacted as a means of relief to the farmers, and provided that no

Commerce
during the
Napoleonic
Wars

After the
Napoleonic
Wars
1815 to 1825

corn should be imported unless the price was 80s a quarter.* The result was expensive bread for the working classes, and the many substitutes resorted to for bread raised the price of other foods. Riots and public meetings were held among the mining and manufacturing districts throughout the whole of England. The period of greatest distress was from 1817 to 1819, and during that time the strong arm of the government was necessary to maintain peace and order. In 1819 came a severe financial panic, and in the single year no less than 3,552 bankruptcies occurred in England alone. Gradually an improvement came. The Bank of England resumed specie payment in 1821. Injurious laws and restrictions were modified, business with the colonies increased and commerce revived.

During this period of war and commercial depression at home England was growing rich in colonial possessions abroad. She not only defeated the French in India as previously stated, and extended her holdings in that direction, but acquired Malacca, Ceylon (1796) and the Cape of Good Hope (1806), besides Australia and many minor dependencies. Captain Cook had discovered New Zealand in 1769, and by his advice in 1788 a shipload of convicts were sent out and Sidney was founded as a

**Growth of
Colonial
Possessions** penal colony. A few sheep were carried thither in 1797, and the fine pastures proved wonderfully adapted to their rearing. The wool was of such excellent quality that this, together with gold, subsequently made Australia one of England's richest and most important colonies.

The period of 1825 to 1850 may be said to mark the transition stage from protection to free trade in England's commercial policy. Prior to this time more or less severe restrictions had been placed upon manufacturing, agriculture and commerce. Numerous monopolies had been granted, as in the case

*A quarter equals 8.252 bushels in our measure and 80s per quarter would be equivalent to about \$2.36 per bushel.

of the Hudson Bay and East India Companies. The Navigation Acts passed in 1651 continued in force, and every commodity, raw and manufactured, was fettered with customs or excise duties. A radical change in England's policy, requiring twenty-five years for its consummation, was now to take place. In

**The Change
from Protec-
tion to Free
Trade**

1820 a company of London merchants sent up a petition to Parliament, praying that all duties except for purposes of revenue might at once be repealed. A similar petition came from the Chamber of Commerce of Edinburgh. Parliament appointed a committee to investigate the question, and the report of the committee was unanimously in favor of granting the relief asked. The Navigation Acts were at once modified and their severity relaxed. The duties on raw silk and wool were reduced despite the opposition of the wool growers. A Reciprocity Bill was introduced by Mr. Huskisson, President of the London Board of Trade, and passed by Parliament, giving foreign ships equal advantages in England to those accorded English ships trading in foreign ports. For a period of nearly twenty-five years the pendulum of public sentiment was swinging in the direction of free trade, but it was not until 1849 that the Navigation Acts were entirely repealed, the Corn Laws abolished, and England had committed herself unreservedly to the policy of free trade.

Meanwhile the mighty impulse given to the iron trade and the application of steam to transportation by land and water were developing commerce and the industries to a still greater degree. Fulton had demonstrated the use of steam for the propulsion of ships in 1807, and in 1838 the first steamship, The Great Western, crossed the Atlantic. The voyage to America

**Application
of Steam to
Transportation**

which had hitherto required five or six weeks was now suddenly reduced to a little more than a week. The British fleet of merchant vessels increased to twelve or fourteen times its size of thirty years before, and under free trade, England became the focus for ships

of other nations bearing the products of nature and art from every clime, and returning, radiated from the same ports freighted with English manufactures for world-wide use. The invention of the telegraph in 1846 was another great step in advance, and with the penny post the means of communication became so improved that supply and demand were regulated, extensive fluctuations in prices avoided, and a steady and healthy commerce promoted. The discovery of gold in Australia in 1851 led to extensive emigration to that colony, vastly increasing the colonial trade of England. Within ten years gold was sent to the mother country to the amount of £100,000,000. This influx of the precious metal by cheapening money raised prices of commodities generally, and thus stimulated production. The opening of the Suez Canal in 1869 afforded a shorter and quicker route to the East, and led to an extension of commerce with India, China, Australia and the East Indies.

Eastern Possessions

The culture of cotton was introduced into Australia, and given a great impetus in 1861-1865 by the scarcity of the American fiber, occasioned by the war of the Rebellion which blockaded American ports, and soon Australian cotton rivaled in quality the celebrated "Sea Island" growth. Besides copper, tin, iron, wine and wheat, wool also came from Australia in large quantities. From India and Ceylon came cotton, indigo, jute, rice, wheat, horns, hides, tea and coffee. Thus England's eastern possessions continued to expand, while roads, canals, railroads and telegraph lines were constructed throughout those colonies.

The English acquired the Cape of Good Hope (called Cape Colony) from the Dutch in 1806. North of this colony were the independent states of the Transvaal Republic and the Orange Free State, still occupied by Dutch Boers. These settlers, who kept up a close intercourse with Holland, were engaged principally in the rearing of sheep and the production of wool, which latter was their chief export. Natal, a newer British de-

pendency than Cape Colony, was of growing importance and produced arrowroot and sugar in considerable quantities. England exported to her South African possessions apparel, furniture, cloths, iron, hardware, leather and machinery, and in turn received from them diamonds, gold, ivory, feathers and wool. The extensive diamond fields proved a great attraction, as the supply of the precious stones was said to be inexhaustible, and the Boers were gradually pressed back. In order to secure more Boer territory, a mock contest was gotten up between a native chief and the Boers, and by misrepresentation to the Boers a British referee was actually appointed to decide the dispute. The decision was adverse to the Boers and the territory was immediately ceded to the English. Friction between the English and Dutch continued, until finally in 1899 open warfare was begun, resulting in a conflict lasting nearly three years. At fearful cost of men and supplies, England subdued her antagonist and annexed the territory of the Boer republics to the British Crown, the one under the name of the Transvaal Colony and the other as the Orange River Colony.

The heavy draft upon the English treasury occasioned by the South African war; the decline in the shipping interests of the United Kingdom and the sale of several large steamship lines to American capitalists; the severe decline in the acreage of wheat in the United Kingdom (from 3,750,000 acres in 1872 to 1,799,489 in 1907), with similar decline in the acreage of corn, together with the fact that Germany, France and the United States have entered the field of manufacture as severe competitors of England, and have even secured important English contracts in steel construction, have given rise to serious doubts whether the United Kingdom will continue to lead the commerce of the world. The overwhelming balance of trade between England and the United States is now against England, and if this should continue for

England's
Present
Commercial
Condition

a series of years, America, instead of being a debtor, would then become a creditor nation, our dividends and interest would remain at home instead of going to England, and the financial center of the world, now in London, would again move to the westward.

CHAPTER XI.

COMMERCE OF THE UNITED STATES.

COLONIAL PERIOD; FINANCIAL POLICY; WAR OF 1812.

By the treaty of Paris in 1783, the American Colonies secured their independence and became the owners of a domain embracing 1,400 miles of sea coast and consisting of 827,844 square miles of rich and productive land. The natural resources of this vast domain embraced every species of raw product, animal, vegetable and mineral, which might be needful in the growth and upbuilding of a nation in the arts of agriculture, manufacture and commerce. At that time the great majority of the population lived on farms, but three and one-third per cent. having their homes in the towns and cities, and there were but six cities having a population of over 8,000. Naturally the energies of the people were devoted to the utilization of the natural products of the soil and forests. Shipbuilding early became an important industry, owing to the abundance of excellent timber along the coast and rivers, and this led to the development of the fishing industry. New England ships were made in great numbers, and were largely engaged in whaling and in the cod fisheries of that coast. Dried codfish was used as money in the Massachusetts Colony at one time, and was one of the chief sources of wealth of that colony. Whatever of foreign commerce existed was carried on chiefly with the mother country. The northern colonies exported timber in the form of shingles and ship timber; and the southern colonies, tobacco, tar, turpentine, rice and cotton.

Several of the colonies made early attempts at the manufacture of woolen, linen and cotton goods for home consumption,

but England regarded all such displays of colonial enterprise with a jealous eye. She wanted no rival manufactories in her colonies. It had been the uniform policy of Spain and Portugal to use their colonies for their sole benefit, and England fell into the same error. The English idea was that the colonies should produce only what England needed, should sell to England only, and in return buy what England had to sell. Accordingly, when the Americans began to make woollen goods to the extent of diminishing the demand for English woollens,

**Prohibition of
Colonial
Manufactures
1650** they were promptly forbidden to export wool or woollen goods from one colony to another. When they turned their attention to the production of

hats they met a like prohibition against the exportation of hats from colony to colony, and the number of hatter apprentices was limited by law. When they made an attempt to smelt a small quantity of iron ore, for their daily needs, a statute was passed which permitted the importation of pig iron into England duty free, but forbade the erection of "any mill for slitting or rolling iron, or any planting forge to work with a tilt-hammer, or any furnace for making steel." During the decade of 1760 to 1770, wonderful improvements were made by Hargreaves and Arkwright in machinery for spinning and weaving, and the colonists made great efforts to secure some of these machines, but the legislation of England prohibited the exportation of machines, tools, plans, and even the immigration of any one who knew how the machines were made. By these means, together with the navigation laws forbidding trade with England, including English Colonies, except in English ships, she made it exceedingly difficult for the colonists to supply themselves with even the coarsest articles of everyday use.

The strained relations between the colonists and the mother country became more aggravated, and the tie which had bound them together for a hundred and fifty years was broken by open hostilities in 1775. The American Revolution was carried

through to a successful issue, but peace did not bring prosperity. The war had shattered business, sapped the brawn of the country, and thrown the states heavily into debt. The confederation proved weak and ineffectual. It had no power to enforce its determinations, carry out its agreements or redress its injuries. In the treaty of Paris it was promised that Congress should "use its influence" to secure the payment of private debts due to Englishmen. But it turned out that Congress had no influence and the debts were never paid. In consequence the British refused to give up some of the military posts on the western frontier. American ships were captured or plundered by the Barbary pirates with impunity, the new republic being powerless to fight them.

In order to prosecute the war of the revolution, Congress issued bills of credit, which were to pass as money. This continental currency at first was taken readily, but as million after million was printed and the credit of the Congress appeared more and more doubtful, its value declined, and at last it grew so cheap that "not worth a continental" became a by-word to express utter worthlessness. During the summer of 1780 the currency became so depreciated that it required ten dollars of the paper to make one cent. Prices rose until corn sold in Boston at \$150 per bushel and flour \$1,575 per barrel.

Samuel Adams is said to have paid \$2,000 in paper money for a suit of clothes, and Washington to have remarked that it required a wagon load of money to buy a wagon load of provisions. The people of Rhode Island thought they had hit upon a solution of the trouble, and issued a legal tender paper currency. Any farmer could borrow this from the public treasury upon security of one-half the appraised value of his land. Nevertheless the currency depreciated, and all their efforts to keep it at par proved futile. In Massachusetts riots broke out in opposition to the efforts of creditors to collect their debts, and discontent and lawlessness were rife.

To add to the unfortunate situation the states became involved in quarrels with each other. Having the right to levy duties on imports, they set out to compete with each other for foreign commerce—the one building up its trade at the expense of another. They went a step farther and laid taxes on goods imported from neighboring states. New York laid a duty on imports from New Jersey and Connecticut. New Jersey retaliated by taxing the New York light-house on Sandy Hook. New Hampshire quarreled with New York over claims, and Pennsylvania and Connecticut wrangled over land in the Wyoming valley. The whole state of affairs demonstrated the imbecility of the government, and the country was steadily drifting into hopeless bankruptcy and anarchy, when in 1787 a convention met in Philadelphia to form our present constitution, which went into effect March 4, 1789.

Quarrels
between the
States

With the organization of stable government came a revival in business. Commerce and manufactures began to thrive and expand as soon as men could begin to depend on the future. General distrust and uncertainty gave place to confidence and faith in the future of the new republic. Trade between the states was no longer hampered by troublesome tariffs, and bickerings ceased. The federal government was able to collect

Results of the
Constitution

its revenues and its obligations were promptly met. Hamilton as Secretary of the Treasury formulated a financial system which bred confidence and created a national credit. Capital began to move in the development of the resources of the country, manufactures began to expand, and commerce redoubled its activity. The federal government assumed the debts of the states, and the holders of continental script suddenly awoke to find that the paper which they had considered of doubtful value was genuine wealth.

Hamilton recommended the establishment of a bank of the United States, with branches in the principal cities. The

capital of the bank was to be \$10,000,000, and the federal government was to own one-fifth of the stock and appoint one-fifth of the directors. The bank was to be a depository of government money, issue paper currency payable in gold or silver and receivable for all dues to the United States, and transact a general banking business. The proposition aroused the fierce objections of those who feared the results of associating government with

**The United
States Bank**

banking, and the objection was at once set up that the Constitution gave Congress no specific authority to organize a bank. Hamilton then laid down the doctrine of "implied powers," claiming that Congress could by implication do anything "necessary and proper" to carry into effect its express powers, and that a bank was such an agency for the conduct of the finances of the government. This was the beginning of the "loose construction" and "strict construction" theories held by the opposite political parties to the present time. The bank bill was passed and President Washington signed it, creating the United States Bank with a charter for twenty years—1791-1811. The bank served as a balance-wheel to our financial system, and as a manufactory of credit, by giving stability and definiteness to the currency, and enabling the people to economize the use of capital. Branches were established in New York, Boston and six other cities, the parent bank being at Philadelphia. Secretary Gallatin strongly recommended the renewal of its charter in 1811, but after a vigorous debate on the question Congress voted it down.

Hamilton's next important measure was the establishment of a national mint. The coins in use throughout the states were a mixture of English, French and Spanish, gold, silver and copper of various denominations, weights and values. The English system of pounds, shillings and pence had been the standard money of the country. To Thomas Jefferson is due the credit for the adoption of a uniform decimal scale, with the dollar as the unit. Jefferson's mint bill followed closely after this reform,

and reduced the metal currency of the country to a uniform system of coins. The double standard of gold and silver was adopted, with a ratio of fifteen ounces of silver to one of gold.

Establishment of a National Mint The latter being then the dearer metal at that ratio, the cheaper, silver, drove it out of circulation, and silver and paper were the only mediums of circulation. With the decimal system of coinage and a national mintage, the facilities for the computation of values and transaction of business were greatly improved.

At the time of the adoption of the Constitution the exports of all kinds of the new republic amounted to about \$20,000,000 annually. Of this amount a very small portion, probably not more than \$1,000,000, was manufactured goods, for it must be remembered that before the war England had thrown almost insurmountable hindrances in the way of the manufacturing industries of the colonies. Owing to the scarcity of skilled labor, and its consequent high price, together with the low prices prevailing, the manufactures of the country picked up slowly for

the first few years after the close of the war, but by 1789 they began to expand with great rapidity.

Tariff and Tonnage Acts In that year Congress passed a tonnage act, which taxed vessels built and owned by the United States six cents a ton; those built but not owned in the United States thirty cents a ton; and foreign ships fifty cents a ton. The tariff act which was passed in the same year discriminated in favor of East Indian goods imported direct, as against the same goods imported from Europe. Stimulated by these provisions, exports and imports rapidly increased, and the American flag went to distant parts of the world. New England ships embarked with cargoes for the far East or intermediate ports, to bring home in return immense quantities of coffee, spices, tea, silk, nankeen and other cloths, all of them articles of great value in comparison with their bulk, and hence yielding good profits to the carrying trade. Portions of these cargoes which did not find a

ready market at home were re-shipped to Hamburg and other European ports. Thus American commerce rapidly expanded, and shipbuilding became more active, so that while in 1789 less than one-fourth of our ocean traffic was in American vessels, in 1792 less than one-fourth was in vessels not American.

An untoward combination of circumstances in Europe arising about this time proved a great advantage to American commerce. The French Revolution was in progress and had moved beyond control. Thrones were in danger. France had been attacked by Germany in the interest of the "divine right of kings." England became involved, and in 1793 declared war upon France. The effect of this war was to further stimulate American manufactures and shipping. Each of the belligerent nations needed the provisions and stores which the Americans

Effect of the Napoleonic Wars now stood ready to furnish. Under the colonial systems of England and France commerce with their colonies was confined to their own ships, but the British navy swept French merchantmen from the seas and visa versa, and hence the colony of Louisiana could render France no help in the form of supplies. The French government therefore threw open French ports to American vessels. The sugar of the West Indies, the coffee and hides of South America, and the provisions of America were thus carried securely into France, thus greatly increasing our foreign commerce.

The Middle and Southern states had, as colonies, long been raisers of cotton, but very little of this useful fiber had been exported until after the adoption of the Constitution, owing chiefly to the difficulty of separating the seed from the fiber.

The Cotton Gin This process has been accomplished by slow and tedious hand labor until 1794, when Eli Whitney invented his cotton gin, one of the first and most useful inventions of America. By means of this machine cotton became a more thoroughly marketable article, and its pro-

duction was vastly stimulated. The development of cotton raising in the south and its manufacture in the north began with this invention, and continued to develop until it has become in recent years one of the largest articles of export among our raw products.

In the decade from 1790 to 1800 the population of the republic increased from 4,000,000 to 5,000,000. Frenchmen came from San Domingo and other West Indian Islands; Irishmen from what they regarded as oppressions in Ireland; Scotchmen, Englishmen and Germans came to enjoy the advantages of popular government and escape the discontent, monarchical oppressions and wars of Europe. These foreigners were rapidly assimilated, and went to work to acquire land and better their condition. The tide of immigration which set in

Immigration thus early in the history of the republic continued to flow hither during the century following. Not being able to compete with the slave labor of the south, these emigrants avoided that section, and settled along the east and west lines, developing the great West and carrying their skill and thrift to the borders of civilization.

The most important event in the early history of the republic was the Louisiana purchase, made during the administration of President Jefferson, by which the United States acquired title to all the land from the Mississippi to the Rocky Mountains and from the Gulf of Mexico to British America. This vast

Purchase of Louisiana 1803 domain had originally belonged to France, but in 1762 that nation transferred it to Spain. The Mississippi River was the natural outlet to the

Ohio valley and the northwest, and since transportation over the Alleghany Mountains was exceedingly difficult owing to the lack of suitable roads, it became highly necessary that the western settlers should have the great waterway to the gulf kept open. The Spanish officials at New Orleans were vexatious, and hampered the commerce of the Americans with useless restric-

tions. In 1800 the Territory of Louisiana was ceded again to France, and President Jefferson soon after sent Mr. Monroe to Paris as a special envoy to act in conjunction with our resident minister, Mr. Livingston, and if possible purchase New Orleans. Two million dollars were allowed for the purchase. Napoleon was in need of funds to prosecute his war with England, and knowing that he could not protect his colony while England ruled the sea, proposed to sell the entire province of Louisiana for \$15,000,000.* The commission had no authority to make the purchase at such a price, and it was impossible to communicate with the government at Washington in time to carry through the deal, so they assumed the authority, accepted the offer, and trusted to the President and Congress to ratify their acts. This purchase not only secured the desired outlet to the sea by water, but doubled our national area and added immensely to the wealth and resources of the nation.

In 1807 Fulton built his first steamboat on the Hudson River, and demonstrated the use of steam in propelling ships. This invention exercised a vast influence upon the future inland commerce of the United States, and was a potent element in developing the resources of the country. It was of the greatest importance that our numerous waterways should be utilized as channels of commerce, but this was impossible until the application of steam power was invented. Prior to this event travel in the interior was slow. By land the pioneer wagons were heavy and the roads dreadful; by water the farmers near
Steamboats the rivers floated their produce down to market in flat boats, and poled them up again. Four months were consumed in making the return journey from New Orleans to St. Louis. The effect was that the farmer paid dearly

*The price was \$11,250,000 payable in 15-year 6 per cent. United States bonds, and the assumption by the United States of claims of American citizens against France, amounting to \$3,750,000. Napoleon agreed not to negotiate the bonds at a price which would injure the credit of the United States.

for all articles which he bought, but received little for his produce. In 1811 Fulton put his first steamboat on the Ohio River at Pittsburg, and the results were marvelous. By 1815 the time from New Orleans to St. Louis was 25 days and in 1823 it was reduced to 12 days. Freight rates were rapidly reduced and prices of commodities consumed by the settlers correspondingly fell; while on the other hand grain and provisions, being assured a more accessible market, rose in price. Lines of packet steamers were established on all the principal rivers, and developed as rapidly as the growth of the carrying trade would justify, until the river commerce of the country became very extensive and handsome passenger boats were plying on our rivers. This means of transportation proved of immense value in the development of the country, and continued until the demand arose for more rapid transportation, and the general era of railroad building set in soon after the Civil War.

During the period just prior to the war of 1812 the prosperity of the young nation was almost phenomenal. Its foreign commerce had grown to large proportions and the American flag was to be found in all the seas and harbors of the world. Home industries were equally prosperous. Raw produce was varied and abundant. Motive power in the shape of rivers and torrents was abundant, and steam power was just making its appearance. Labor being scarce, labor-saving machines naturally suggested themselves to an ingenious people. Sawmills multiplied wherever timber afforded materials for house and ship building, and streams afforded it the means of transportation. Agricultural implements were improved. Cotton began to be raised on an extensive scale and was woven at home as well as exported raw. The products of the loom could not for many years compete in quality with those of England in fineness, but they were stronger and more durable, and on these accounts were often preferred. Woolen and linen manufactures, first begun on a small scale, were afterwards

Home Industries Prior to the War of 1812.

developed into considerable industries. Hemp and flax grew abundantly and furnished the materials for sacking, cordage and sailcloth. Leather became an important article of manufacture, and in some of the forest towns of New England, where hemlock forests abound, extensive tanneries were established. Iron and glass from small beginnings rose to be important industries, while paper making, one of the humble attempts of the young republic, developed into such a flourishing branch of manufacture as to become of immense extent and value. Fisheries were vigorously prosecuted and gave employment to a large population, chief of which were the cod fisheries of New Foundland, the mackerel and the whale fisheries. The latter was carried on in the Arctic, Pacific and Southern Oceans; whale-bone and whale oil, with seal oil and skins, being the valuable products of these enterprises. In the year 1800 American ships amounting to 130,000 tons burden were engaged in whaling.

During this period (1803-1812) France and England were engaged in a gigantic struggle. All Europe was affected, and nation after nation was dragged into the conflict. England ruled the seas and Napoleon's armies were invincible on land. America, under the wise policy of Washington, remained neutral, and was reaping a rich harvest in her foreign commerce. American ships swarmed every sea. They were loaded with the products of every clime, sailed to the United States, broke the voyage, unloaded the cargo, immediately reloaded it again, and proceeded to France and Spain to dispose of it. The English admiralty courts had held in 1800 that while it was illegal for the ships of a neutral to carry the products of a belligerent to or from that belligerent's colony, yet where the goods were carried from a belligerent colony to a neutral port, unloaded, and entered in the custom house, they could then be sent in the same ship to a belligerent, without violating international law. Under this decision En-

**Capture of
American
Ships**

gland saw in 1805 that France was prospering and her colonies furnishing her with produce the same as in time of peace, and this under the sanction of an English court. The decision was accordingly reversed, and it was held that a voyage from the United States to a belligerent port with goods from a belligerent colony was illegal. Under this decision American ships by the score were captured by the British cruisers.

Parliament followed up the matter by passing in 1806 an Order in Council declaring the whole coast of Europe under blockade, and prohibiting any ship from trading in any of these ports without a British license. In retaliation, Napoleon issued the "Berlin Decree" declaring the coast of the British Isles in a state of blockade. Thus American commerce was placed at the mercy of both the French and English. As a result over 1,600 American ships were captured by France and England and their cargoes, worth millions of dollars, condemned and confiscated.

President Jefferson struggled against these outrages as best he could. The people were hot for war, but Jefferson knew that the nation was in no condition for war, and hence he tried "peaceable coercion." Congress passed the "Embargo Act" in December, 1807, declaring an embargo on all American shipping. Our ports were sealed absolutely to foreign trade. Jefferson believed that the loss of our products would bring England to terms. The embargo ruined the commerce of the nation for the time being. The price of wheat fell from \$2 to 75 cents a bushel, and general stagnation and business distress prevailed. Prior to the embargo the British had claimed and exercised the right to search American ships for British subjects, thousands of whom were employed in the American merchant marine, owing to the higher wages paid on American vessels. This right of search was exceedingly obnoxious to the Americans. The Embargo Act not having the desired effect on England, war was declared—a war which cost the United States \$150,000,000, besides the

War of 1812

destruction of a profitable commerce, but it vindicated American rights, taught the young republic the necessity for a navy, and laid the foundation for reciprocity in international trade, a principle which has since exercised an important influence on the commerce of nations.

CHAPTER XII.

COMMERCE OF THE UNITED STATES—Continued.

REVIVAL OF MANUFACTURING; TARIFF LAWS; SLAVERY; CIVIL WAR.

When the embargo, followed by war, withdrew the stimulus from American husbandry by destroying the market for our produce, and foreign commerce and ship-building were at a standstill, the people's minds were thrown back upon the manufacturing industries of the country, and American ingenuity set to work to improve and develop these. The tariff on imported goods, chiefly English, was increased, improved machinery was invented for working up raw products, especially in the cotton industry of the south, inland communication was improved by the building of better roads and the construction and operation of steamboats on the rivers. After the treaty of peace between England and the United States, which was signed at Ghent, December 24, 1814, and the defeat of Napoleon at Waterloo in the following spring, peace reigned universal on land and sea. The United States found itself able to compete with the monarchies of the old world in the race for commerce. Its vessels went again to all the harbors of Europe, and new avenues of trade were opened up. The exports of cotton to England showed a remarkable increase. In 1809 the number of bales exported was 14,000, in 1819 this export was 175,000 bales. Considerable quantities of grain, rice and tobacco were also sent to Europe, while to the West Indies we sent our staple, flour. Furs, hides and other products were sent to India and China to be exchanged for tea, some of which was exchanged again in Germany at a second profit. The one serious drawback of the times was a defective

Commerce
after the War
Panic of 1819

financial system. Congress had refused to renew the Charter of the United States Bank in 1811. The war had drained off the specie, and the country was filled with depreciated paper currency. A new bank was organized in 1817 to improve the situation, but it was mismanaged and failed to bring about the resumption of specie payments. Finally in 1819 there was a panic and general financial collapse. Banks and business houses failed and there was general distress. This panic was coincident with the one in England.

In 1825 the Erie Canal, which furnished cheap transportation to market for the products of Western New York and the territory tributary to the Great Lakes was completed. About the same time the government built a military road from Baltimore, through Wheeling and Cincinnati to St. Louis, and thus the opening of routes of communication with the far west diverted much of the produce of those territories from New Orleans to New York. Agriculture improved, and the products of the soil increased in quantity and variety. Saxony sheep of the best breeds were imported for the improvement of the quality of American wool. Flax and hemp, hitherto chiefly supplied from Russia, were cultivated more extensively in order to supply the demand for these fibers by eastern shipbuilders for caulking ships, and also for the spinning and weaving of linen cloth. The cotton industry continued to increase at a marvelous rate,

Home
Industries
1820-1830

the price per pound fluctuating with a downward tendency, but the gross value increased enormously. Massachusetts, Rhode Island, New York and Pennsylvania were the seats of the cotton industry, the largest mills being located at Lowell. The South was an agricultural section. Its slave labor was better suited to farming than to factory work, and there was a scarcity of skilled labor in the South. For these reasons the cotton mills were located in the North, where skilled labor could be had, and they were situated on the coast or on navigable rivers within easy reach of

the sea coast, in order that the raw cotton could be advantageously brought to the mills from the plantations of the South. Mining was another industry which began to be developed about this time (1815-1830). Rich as the country was in mineral wealth, for want of capital little had been done prior to this time to develop the mines of iron, coal, lead and the precious metals, and even now they were worked in a most inadequate degree. The introduction of steam as a motive power on steamboats and for propelling machinery in the factories, quickened the demand for coal, while the iron and steel industry began a development which has since outgrown all others in the diversity and importance of its finished product.

In order to maintain and encourage manufacturing enterprises, the United States early adopted the policy of protective duties on imports—a policy which has been a cause of discord between the North and the South. The Southern states were very fertile and possessed the doubtful advantage of slave labor—a class of labor suited best to agriculture. As a consequence those states, restricted to agriculture, were opposed to protection, while the Northern states, being devoted largely to manufacture, sought the support of protection. The planters were desirous of getting manufactured goods in the cheapest markets in exchange for the produce of their plantations. They were free traders, while the North was in favor of free labor and opposed to slavery. Slavery and trade protection thus became the bones of contention. The first tariff law, passed in 1789, imposed a duty of about five per cent. In 1812, to meet the demands of war, the rate of duty was increased to about fifteen per cent. A new law was passed in 1816 imposing different rates of duty upon different classes of products, but the average was about twenty-five per cent. In 1824 the manufacturers found it still difficult to maintain successful competition against English products, and clamored for further protection. The English had brought fresh skill and

**Tariff Laws
and Slavery**

new inventions to bear upon their goods and were selling at very small profits. Notwithstanding the vigorous opposition of the planters of the South and consumers generally, Congress passed a new tariff law, raising the duties to thirty-three and one-third per cent. Again in 1828 the law was amended, increasing the duties to an average of forty-five per cent. The South was indignant, since it was not a sharer in the benefits of the tariff, but on the contrary suffered in consequence. The cotton, rice and tobacco of the South were shipped largely to Europe, and in European markets these commodities brought no higher prices on account of American tariffs, while the price of all manufactured articles which the agricultural states might consume was considerably increased. Carolina went so far as to threaten secession, but trouble was averted, and in 1832 the law was modified by taking off most of the merely revenue duties, and reducing the protective duties. In 1833 Henry Clay's Compromise Tariff Bill was passed, by which a gradual reduction in duties was provided for, down to a uniform level of twenty per cent. by the year 1842. In that year, however, the manufacturing interests in Congress violated their pledge and reimposed the old rates of duties. Thus the struggle over tariff and slavery went on, the latter becoming more acute until merged in the great Civil War of 1861.

The wise navigation laws of 1792 provided that only American built vessels should be employed in American commerce. Following this was the enlightened foreign policy of neutrality during the Napoleonic wars, by which our shipping was unmolested, while that of other nations suffered. Then the "Tonnage Laws" previously alluded to helped to develop our merchant marine. During the war of 1812 New York and Baltimore ship-builders became famous for producing the swiftest fleet of privateers called "clipper ships" that ever spread sail on the ocean, scarcely one of the newly-built being captured by the enemy. After the war of 1812 New York and Philadelphia

merchants established sailing packets to Liverpool and other foreign ports. Stephen Girard was one of these merchants. From 1815 to 1850 may be called a period of reciprocity in shipping. The law of 1815 equalized the tonnage and import duties on all ships and produce of nations which were willing to extend the same privileges to American ships and cargoes, and to all other nations we offered the severe terms, that "no produce should be imported into the United States except in vessels of the United States or in the vessels of the citizens of the country of which the goods are the growth, production or manufacture." This was an enactment of the English Navigation Laws. Under these laws our foreign commerce flourished and ship-building became a prosperous industry. Our coasting trade and fisheries have always been kept exclusively to ourselves, and about 1830, owing to increased production of cotton, rice and tobacco for export and also for the factories of New England, our coasting trade developed extensively. Another great increase in the coasting trade set in about 1846, owing to the settlement of California. Our merchant marine reached its zenith of size and prosperity in 1857. Seventy per cent. of our foreign trade was then carried in American vessels. About 1850 the period of steam and steel began, and this proved a period of decadence for our merchant marine. The construction of iron vessels returned to the British Isles. The English could build these vessels cheaper than we, and they have since possessed almost a monopoly of the industry, although there are now indications of a decided change in this respect. From seventy per cent. in 1857 the proportion of our commerce carried in American vessels has steadily declined, until in 1881 to 1885 it averaged barely twenty per cent., and in 1900 it was less than ten per cent. Seven-tenths of our total export trade, and nearly two-thirds of our total foreign trade, both export and import, is carried in British vessels. Let us hope that this condition of affairs will not long continue.

Merchant
Marine

Congress in 1811 refused to renew the twenty year charter of the United States Bank organized by Hamilton. During the war which followed, the financial system was badly disarranged. Specie payment had been suspended and the country was filled with paper currency circulating at 15 to 30 per cent. below its par value. To remedy this evil and resume specie payment, a second United States Bank was organized in 1816 with a capital of \$35,000,000, power to establish branches, etc. The parent bank was in Philadelphia, and twenty-five branches were established throughout the country. President Jackson was hostile to the bank, as he believed it had been opposed to his election. Accordingly in 1833, on the pretext that the bank was unsafe, he ordered the Secretary of the Treasury to remove the deposits of public funds and to place them in state banks. This was almost a death-blow to the Bank. It was obliged to call in its loans and reduce the volume of its business almost to that of an ordinary bank.

During the decade 1825 to 1835, the country had been very prosperous. The national debt had been steadily reduced since the close of the war, and in 1835 the last dollar was paid. The public lands were being sold in the west at a rapid rate, and this brought a stream of money into the treasury. The receipts of the government far surpassed its expenditures. Congress declined to reduce the tariff for fear of injuring the manufacturing interests of the country, and instead of using this surplus revenue for internal improvements, which the strict constructionists claimed would be unconstitutional, or for harbors and fortifications along the coast, as urged by Senator Benton, decided that the amount should be distributed among the states to be used by them in public works as they chose. The surplus amounted on January 1, 1837, to \$37,000,000. Three installments were paid, but before the fourth could be made ready, the great financial panic struck the country and left the treasury bankrupt.

**The Second
United States
Bank**

**National Debt
and Surplus**

The cause of the panic was attributed by the friends of the United States Bank to the crippling of that concern, and by the manufacturers to the reduction in the tariff, but while these may have been factors, the most potent cause was, without doubt, overspeculation. For ten years prior to the panic the country had been upon a general wave of prosperity. Trade was active and a general expansion in business was in progress. Merchandise of all kinds was in demand at advancing prices. Cotton was six cents a pound in 1830 and twenty cents in 1837. New business enterprises were commenced and old ones enlarged. Buying and selling of western land became a mania. Town sites were laid out in the western prairies and lots were sold at inflated prices. It is said that so many towns were laid out in Illinois that there was little land left for farms.

**The Panic of
1837**

Banks were multiplied, and paper money printed to meet the demand for capital with which to carry on the business of the country, irrespective of the amount of specie back of it all. The volume of paper money in circulation in 1837 ran up to one hundred and forty-nine millions, while the specie supporting it was less than forty millions. Speculators were buying up public lands at one dollar per acre, and as soon as the government land agents deposited the cash in the banks, the speculators borrowed it and bought more land. Thus the cash went its rounds and property changed hands. Finally the government issued its "specie circular," requiring that payment for public lands be made in specie. This embarrassed the speculators and began the feeling of distrust. Banks began to call in their loans, and depositors began to withdraw their funds. Cotton fell from twenty cents to eight cents, and other products proportionately. English investors began to try to withdraw their capital, and then suddenly the crash came. This was probably the worst panic in point of severity the country has ever seen, although the volume of business involved was far less than those of later dates. "Cheap money," rashness and overspeculation, and wild

financiering by the treasury department of the government, were the combined causes which led to this disastrous result.

The application of steam power to transportation brought about an economic revolution throughout the world, but nowhere was this more marked or beneficial than in the United States. The canal boats and crude steamboats which came into use during the two decades following the war of 1812, were superseded by the river packet and railroad train after 1830. By means of improved facilities for transportation, the markets were brought nearer to the farmer, so that his cotton, corn or cattle were easily delivered and converted into cash, and in return he was supplied with manufactured goods at far lower prices than formerly, owing to lower carrying charges. Travel also began

Railroads to become something of a pleasure instead of a serious task, as it had been in the days of the stage coach, and the movement of the people broke down provincialism, improved the general intelligence and led to the social and industrial upbuilding and advancement. In 1830 there were but 23 miles of railroad in the United States, but by 1840 the mileage had increased to 2,775. In a journey of two hundred or three hundred miles a passenger was liable to be compelled to change cars several times, and the accommodations were far from luxurious, but they represented a step in the onward march of civilization. In 1850 the mileage of the railroads had increased to nearly 9,000 and in 1860 to nearly 30,000.

Another valuable invention, closely connected with the railroads, came out about this time and added vastly to the facilities of commerce, the telegraph invented by Morse in 1844. Congress in that year made an appropriation of thirty thousand dollars for the purpose of constructing a wire from Washington to Baltimore, in order to practically test the invention. The National Whig Convention was holding its session in Baltimore, and over this wire came the news of the nomination of Henry Clay for the Presidency. The construction of telegraph lines

then proceeded with great rapidity, especially in the Eastern states. In 1856 the various lines were combined under the corporate name of the Western Union Telegraph Company. The telegraph not only proved to be a wonderful addition to the facilities for transacting the business of the country, by affording quick communication, but also made the safe and rapid operation of the railroads possible, thus accelerating the transportation of goods and people. In 1858 the first telegraph cable was successfully laid upon the bed of the ocean, and thus rapid communication between the old and the new worlds became possible.

In 1845 Texas was admitted into the Union, and thereby was added 376,163 square miles to our broad acres, a large part of which is rich prairie, well adapted to grazing or tillage. The vast herds of cattle maintained upon these ranges have furnished the country with a considerable portion of its supply of meat and hides. A dispute with the Mexican government over the boundary of Texas furnished a pretext for war with that country, the real object of which was the acquisition of the vast sunny land stretching from the Rocky Mountains away to the Pacific. The war was a series of victories for the United States, and Mexico, poor, misgoverned and distracted by numerous revolutions, was overpowered, and compelled to cede to the United States the territory which we coveted. Americans can

**The Mexican
Cession**

never take pride in the story of this war, which had for its real object the conquest of a peaceable though weaker neighbor's territory. The Mexicans were forced to make what terms they could. They accepted the Rio Grande as their border, and surrendered all land north of it, embracing New Mexico and California, extending northward to the border of Oregon. The United States assumed the unpaid claims of American citizens, amounting to \$2,500,000, and paid \$15,000,000 for the territory. But like all ill-gotten gains, this territory led to difficulty at once, and a severe

dispute arose over the slavery question, which culminated a few years later in civil war. In 1853 an additional tract of 44,064 square miles of land was purchased from Mexico, called the Gadsden Purchase.

At the time of the Mexican Cession the presence of gold was not known, but by accident the discovery was made in the following year, and as soon as the news spread throughout the middle and eastern states, a great rush set in for the Pacific coast, both overland and by water via the Isthmus of Panama. The population of California in 1847 was 15,000, and the output of gold is estimated to have been about \$890,000. This amount was increased to \$10,000,000 in 1848, to \$40,000,000 in 1849, to \$50,000,000 in 1850, to \$55,000,000 in 1851 and to \$65,000,000 in 1853, when the population had increased to over 100,000 of a motley mixture of nearly all races and tongues, bent upon the one mission, that of getting rich quickly. The discovery of gold on the Pacific coast gave a new impulse to the mining industries of the country, and besides developed the trade of that portion of the country very rapidly. The harbor of San Francisco was filled with shipping, and thrifty towns and cities sprang up where only straggling villages existed before.

**Discovery of
Gold in
California**

Following the example of England in the erection of its great crystal palace and exposition at Hyde Park, London, in 1851, the first international exhibition in this country was held in New York in 1853. It was fitting that this new and thriving nation, then a little more than a half century old, should measure its progress in the arts and sciences by a comparison with the best the world produced. Never before had such a display of the products of the hand and brain of man been attempted in the Western Hemisphere. In the departments of machinery and tools, agricultural implements, hardware, mineralogy and mining, as well as the fine arts, America made a very extensive and creditable display, rivaling in many respects the productions

of Europe. Not only our choicest products in almost infinite variety were presented for exhibition, but from other countries

**The Great
Exposition in
New York in
1853**

and climes, from distant parts of the globe, came exhibits represented by countless contributors. England and France made superb offerings of their works of art and manufacture, and the Sultan of Turkey fitted out a steam frigate especially to convey the splendid fabrics of the Ottoman empire, richly carved cabinets, rugs and carpets of wonderful elaboration and beauty. This exposition did much to stimulate the spirit of invention and discovery, and improve processes of manufacture throughout the country, and was the beginning, the formal opening as it were, of what has proven to be a half century of the greatest achievements in mechanic and industrial arts the world has ever witnessed.

During the period of 1840 to 1855 there had been established throughout the country a system of banking, under state laws, called "free banking," by which banks were allowed to issue circulating notes based upon little or no security, and subject to very loose and inadequate restrictions. The chief object in the scheme seemed, on the part of the banks, to be to issue notes, get them into the hands of the people for value, then take measures to prevent the note holders from calling on the banks for specie. Various subterfuges were

**State Banks
and the Panic
of 1857**

resorted to for this purpose. In one instance in Illinois, where an effort was made to present the notes at the bank's counter for redemption, no counter was found, but merely a hired room in a remote and obscure neighborhood. This unreliable system of banking was permitted by statutory enactments in sixteen states, and under it "mushroom banks" were started in large numbers all over the west. Paper money was plentiful and counterfeits floated in large quantities. These conditions induced speculation of all descriptions. Cities were laid out, railroads projected, and debts piled up at high rates of interest, all based upon the prospects of large returns in

the near future. A panic was inevitable, and in the autumn of 1857 it came, carrying down in the ruin thousands of reputable firms, and entailing untold misery as usual upon innocent widows and orphans. Nevertheless many of the banks which had failed got on their feet again within the next three years, so that when the war began, in 1861, there were 112 of these so-called "solvent banks" doing business. This "wild cat" money continued to circulate until it was driven out of existence in 1863 by the 10 per cent. tax imposed under the National Banking Act.

The period which we are just now considering—the decade preceding the Civil War—was notable for the increased number of its inventions and improvements in the processes of manufacture. In 1857 there were issued 2,000 patents, 438 of which were for agricultural implements and processes, consisting chiefly of improvements in cotton gins, rice cleaners, reapers, mowers and plows. The next year there were issued 3,710 patents, of which 153 were for improvements in reaping and mowing machines, 42 for improvements in cotton gins and presses, 164 for improvements in steam engines, and 198 for improvements in railroads and railroad cars. Some of these inventions have proven of the greatest importance and economic value to mankind, such as those relating to the perfection of the sewing machine, printing presses, and the improvements in the manufacture of rubber goods, carpets and wall paper. Prior to this period ready-made clothing and boots and shoes were practically unknown, these articles being made in small shops, employing a few workingmen, but now with the advent of machinery for cutting, sewing, etc., they began to be turned out by factories at greatly reduced cost to the consumer.

With the minds and energies of the people thus absorbed in their abounding material prosperity, new inventions and improved processes constantly appearing to render human labor

more effective, and matter yielding to the brain and energy of progressive man, we approach the great Civil War (1861-1865), which marked the opening of a new era in the commercial as well as political history of our country. Prior to this time the North had been the manufacturing section and the South was devoted almost exclusively to agriculture. Owing to their diverse interests these two sections had been in almost constant contention for the past fifty years over the tariff question, but gradually there had loomed up another and even more serious cause of disagreement, the slavery question. The two conflicting systems of labor, free in the North and slave in the South, would not mix. Emigration would not put itself in competition with slave labor, and hence passed in parallel lines westward across the North. Now came the Civil War, which cost 600,000 lives and an incalculable amount of property, and resulted in an industrial revolution of the labor system of the South, forcing that section to adopt the system existing elsewhere, and therefrom dates the mechanical development of the South.

Era of the
Civil War

CHAPTER XIII.

COMMERCE OF THE UNITED STATES—Continued.

GROWTH OF INDUSTRIES; INVENTIONS AND DISCOVERIES; FOREIGN TRADE.

The Southern states were the scene of the conflict, and resounded with the tread of armies. As a consequence, the prosperity of the South was arrested during the war and its fields and towns destroyed or damaged. The North held the mechanical industries of the country, and under the stimulus of war these industries were expanded to their fullest capacity. Business of all kinds in the North prospered, prices were high, and the armies in the field were sustained and paid by a thrifty agricultural and manufacturing domain behind them. The agricultural South could not compete with the manufacturing North.

After the War Prior to the war, the diversified resources of the South were not appreciated—scarcely noticed. Her rich deposits of iron and other ores, the coal to work the ores, her timber and stone and her water power were almost untouched. It was actually contended that manufacturing could not be profitably carried on in the South on account of climatic influences. But the war not only revolutionized the system of labor in the South, but thereafter began the mechanical development of the Southern states. With the return of peace, attention was turned to the elements which are essential to industrial development, and there has since grown up in that section an extensive factory system. The South found that besides the capacity to raise cotton and tobacco for domestic and foreign consumption, great sources of wealth were hidden beneath the surface in the mineral deposits of the country. Thus near Birmingham, Alabama, rich iron mines were discovered, with

coke-making coal and limestone needed for smelting and making steel near by, and thus the cost of making did not involve the transportation of either of these products. As a result, Birmingham has now become an important manufacturing center.

For a time directly after the war, and as its natural consequence, agriculture and all other industries in the South were depressed, and society was more or less discouraged, disorganized and in a state of doubt. Fears were entertained that their great staple, cotton, would not be raised so plentifully under free as slave labor, but the contrary was proven to be the case. The largest cotton crop prior to the war was in 1860, and amounted to 4,669,770 bales. This yield was not reached again until 1871, and since 1876 there has never been a year when the crop did not exceed that of 1860, while in 1901 it reached the enormous total of 10,383,422 bales. While formerly the South exported nearly all of her raw cotton or sent it to the mills of New England, she now manufactures a very large part of it, 1,583,000 bales having been woven by southern cotton mills during the year 1901 as against 1,964,000 bales manufactured in the North. The opening up of coal mines in the South for fuel supply, and the movement of northern capital and skilled labor southward, may be ascribed as the reasons for the increased manufacture of cotton in the South.

The growth and development of the cotton industry in the South during the past forty years may be almost taken as an example of the general development of the country in all lines of activity. New industries have been constantly appearing and old ones enlarging. New processes and improved machinery have been constantly reducing the cost and utilizing products which formerly were considered worthless. Many industries have passed from the household or small shop to the large factory, where steam power or electricity have supplemented man power, and thus cheapened production. The wonderful devel-

opment of the natural resources of the country, the ambition manifested by the people in all lines to supply home demand, ever increasing on account of a large immigration, and to have a share in foreign markets, have tended to stimulate all lines of manufacturing during this period. Added to these, the protective tariff has given an additional encouragement to a large list of industries, and assisted in the general commercial advancement.

In no class of industries has there been a greater advancement in the methods of manufacture from the raw to the finished product during the past forty years than in that of iron and steel, and in none has there been produced a greater diversity of finished products. The processes through which the metal passes, from the ore in its natural form up to the manufacture of almost an unlimited variety of articles for man's convenience, ranging from the spiral watch spring up to the mammoth beam of structural steel, is a triumph of inventive genius. One of the principal causes of the enormous development of the steel and iron industry has been the demand for railroad track, incident to the expansion of our railroad systems. Iron rails were formerly used, but steel has almost entirely superseded them. The substitution of coke for coal and charcoal in the production of pig iron, and the cheapening of the process of the manufacture of steel caused by the introduction of the Bessemer and Siemens-Martin or open hearth system, have tended to facilitate the use of steel in the construction of buildings and otherwise, while the invention of new machinery usually necessitates the use of steel in its construction.

In 1859 petroleum was discovered in Pennsylvania, and the supply from that region and from Ohio has thus far proven inexhaustible. A method of refining the oil was soon after devised, and there are now over two hundred products of this mineral oil used for illuminating, lubricating, etc., the whole

Iron and
Steel Industry

constituting one of our most important industries. A great demand for this oil in its various forms has made it an important article of domestic and foreign commerce. Thousands of miles of pipes have been laid from wells to the seaboard and the Great Lakes, and extensive refineries have been established in New York, Philadelphia, Cleveland, Buffalo and Chicago. Large discoveries of fuel oil were made in Texas in 1901, affording a valuable source of supply to western consumers, and proving especially fortunate for use upon the great prairies of the west where wood and coal are scarce.

**Discovery of
Petroleum**

In 1867 the United States again enlarged its territory, by the purchase of Alaska from the Russian government for \$7,200,000. This has proven to be, like other extensions of our boundaries, a profitable investment, the seal fisheries alone being worth much more than the price paid for the entire country. Alaska is 1,200 miles long from north to south, and 2,100 miles wide from east to west. It is the chief source of supply of salmon fish, which abounds plentifully, and the industry of fish canning here is the largest in the world. Valuable gold mines have been discovered and partially developed, and the country is no doubt rich in other minerals. The extensive forests will also prove a source of wealth to the nation.

**Alaskan
Purchase
1867**

One of the most important achievements of the decade following the Civil War was the completion in 1869 of the great transcontinental line of the Pacific Railroad. The astonishing development of the Pacific coast, and the travel and traffic that inevitably followed, created an imperative need for a cheaper and easier method of transportation to and from the east. This great achievement in railroad building, difficult as it was, has since been followed by other routes across the continent. The cheapening of transportation, together with improved facilities for carrying perishable

**Pacific
Railroad**

freight, has enabled California to market her fruit, one of her great products, throughout the East. The Eastern and Middle states have been brought next door to the West, and prices of all commodities have tended to become lower to the consumers. Vast areas of unproductive and apparently barren land in the West have become productive and valuable because they are brought within reach of a market.

At the commencement of the Civil War our foreign trade footed up about \$700,000,000, the imports and exports being nearly equal and the balance being about \$20,000,000 against us. Our principal export at that time was cotton. The war blockades seriously interfered with foreign commerce, and especially reduced our exports, so that in 1865 these amounted to only about \$166,000,000, almost wholly from the Northern states. The great staple, cotton, had been neglected or destroyed and very little raised. Industries in the South were prostrated, and

Foreign

**Commerce after
the War**

home consumption demanded nearly all the North produced. But the foreign commerce quickly regained its activity, and continued to increase until arrested in a measure by the panic of 1873, the imports, however, considerably exceeding in value the exports. The principal industries of the country at that time were the textiles, clothing, lumber, iron and steel, leather, boots and shoes, flour and meal, sugar, paper, printing and publishing, farm implements, carriages and liquors, malt and fermented. The principal exports consisted of the great natural products, cotton, petroleum, tobacco, wheat, lumber and iron, for the United States had not yet arrived at the point where its manufactures could compete with those of Europe. The depression which followed the panic of 1873 caused a falling off in our foreign trade, but after 1875 trade revived, and for nearly ten years showed a steady increase. The exports now began to exceed the imports, and with slight exception have continued in that relation until the present time. Since 1896 our imports have increased com-

paratively little,* while our exports have enormously extended, leaving a balance of trade in our favor of nearly \$700,000,000. The United States is now a vast exporter of meat and other food products, while its manufactures are constantly finding a wider market. The skill and ingenuity of American workmen, with the latest and best types of machinery, enable the United States to manufacture goods cheaper than Europe, while paying American workmen larger wages than are paid in the old world.

In 1861 the banks throughout the country suspended specie payment. The National Treasury was empty, and to carry on the war the government resorted to an issue of paper money, called "greenbacks." The volume of this currency ran up to \$450,000,000, and, as was inevitable, depreciated in value, thereby causing a rise in prices of commodities. Two years later (1863) the National Banks came into existence, with authority to issue paper money based on their deposit of government bonds. Thus the country went entirely upon a basis of irredeemable paper money. After the war closed, it was the desire of the government to get back towards a specie basis, and to that end proposed to gradually pay off and retire the greenbacks. This was done until the volume had been reduced to \$356,000,000 in 1868.

Resumption
of Specie
Payment

There was a general outcry against a contraction of the currency. Speculation throughout the country was active and business was constantly expanding. Corporations, individuals, cities and states were active in the promotion of their various enterprises and works. An unprecedented mileage of railways was constructed, and a corresponding bonded indebtedness floated. Thus the condition of the country was unstable. Our foreign commerce from the year 1872 had been very unsatisfactory, the balance of trade setting heavily against us, and foreign investors had called in some of their loans. The crash

*Our total imports in 1901 were \$823,172,165 and total exports amounted to \$1,487,764,991.

came like a clap of thunder out of a clear sky when the firm of Jay Cooke & Co. failed in New York. This was the beginning of a general break in public confidence, and numerous failures of banks and business houses all over the country followed. Credit in business was refused, and debtors everywhere were pressed for payment. There was a general run upon savings banks, many of which failed, disclosing shocking irregularities in management. The prices of agricultural products declined, and manufactured goods were a drug on the market. Factories closed or ran on short time, and thus the months drew on until after nearly two years business began to revive again. Severe as the lesson had been it taught the people the necessity for a stable currency, and resulted in steps being taken to reach the resumption of specie payment, which was accomplished in January 1, 1879.

About 1876 there was a great advance in the production of breadstuffs in the United States. The vast wheat fields of Dakota were opened up to cultivation, and with improved farm machinery and facilities for handling the immense volume of grain there produced, grinding it into flour, or exporting it in bulk by waterways to European ports, an immense industry grew up and greatly added to the volume of our foreign trade. The United States became at once the greatest exporter of wheat and breadstuffs in the world, selling about one-half its crop to foreign countries. The method of manufacturing flour was revolutionized and cheapened about this time by new milling processes, and with low rates for shipment by rail and water routes to the seaboard through the Great Lakes and Erie Canal to New York or the St. Lawrence River to Montreal, where it was loaded into ocean steamers, we were able to supply Europe with breadstuffs cheaper than from any other source. In 1867 the United States exported a little over eight per cent. of its wheat product, but in 1880, with the increased production and foreign market

Panic of 1873

**Agriculture in
the Northwest**

opened up, this percentage had risen to more than forty per cent., and now Great Britain buys four-sevenths of all the flour the United States has to sell.

The McKinley bill which became a law in 1890 enlarged the free list, but advanced the duty upon many manufactured articles. The sugar consumed in the United States in 1890 amounted to nearly 1,500,000 tons, of which only 250,000 tons were domestic product. Thus the protective duty on this article, while benefiting the Louisiana planters, served to raise the price on all sugar consumed throughout the country, and had little effect in increasing the volume of the domestic output, owing to the fact that the area of sugar land in the South was limited. On the other hand to remove the duty entirely would destroy

McKinley Bill
and Reciprocity

the sugar planters of the South, who would be utterly unable to compete against the sugar growers of Cuba, owing to the fact that sugar can be produced much cheaper in Cuba than in Louisiana. The Cuban grower does not replant his cane oftener than once in eight or ten years, while the Louisiana planter must replant every second year. The Cuban grower also has the advantage of a more favorable climate and a longer grinding season, with no damage from frosts. Therefore, to protect the Louisiana sugar grower and the public, the McKinley Act put sugar on the free list, and paid a bounty to domestic sugar producers. At the same time a discriminating duty of one-tenth of a cent per pound was placed upon sugar imported from countries which paid a bounty upon sugar exportation.

But the most important and interesting feature of this tariff legislation was the reciprocity feature, due to the far-seeing statesmanship of Secretary of State James G. Blaine.* His foreign policy looked to a trade federation of the countries of

*Thomas Jefferson was the originator of the reciprocity idea, and in a report to Congress in 1793 recommended reciprocity as the true method of meeting the problem of our foreign commerce.

the Western Hemisphere. He elaborated the Bureau of American Republics, and through his efforts, under the administration of President Harrison, a Pan-American Congress was held in Washington presided over by Mr. Blaine. Reciprocity treaties were concluded with several countries, considerably extending our trade. Those with Germany, France, Belgium and Italy resulted in relieving American pork from the embargo placed upon it in those countries. Under the policy of reciprocity our foreign commerce increased rapidly. Thus in 1891 we sent to Cuba approximately 115,000 barrels of flour; in 1892, 366,000 barrels; in 1893, 610,000 barrels; in 1894, 662,000 barrels. After the repeal of the act, we sent Cuba in 1895, 380,000 barrels of flour; in 1896, 177,000 barrels; and in 1898, 130,000 barrels.

Nothing has contributed to the commercial growth and development of the United States more than its railroad system, which now reaches, with its multitudinous branches, nearly every village in the eastern half of the republic, and all of the important towns in the western portion, while the trans-continental lines provide great highways of travel and transportation from ocean to ocean. The growth of our railway systems, from their unpropitious beginning in 1827 to their present gigantic proportions, embracing a mileage of nearly 200,000 miles, is one of the most animated chapters in our national history. The United States has a far greater mileage of railways than any other country—more than all Europe, and nearly one-half that of the entire world. About 1,300,000 freight and 26,000 passenger cars run upon these tracks, and the net earnings foot up nearly \$400,000,000 per annum. But the railway systems of the United States have not only extended in mileage but in even a greater degree in their capacity to move freight and passengers. The roadbeds are more substantial than formerly, the rails larger, heavier, and of steel instead of iron; the roads have fewer curves, lower gradients, steel bridges,

double tracks, larger cars and more powerful engines, so that trains haul heavier loads and make better time.* Numerous safety appliances, signals, improved air brakes and other devices now contribute to the safety of railroad travel, and reduce the loss by accidents. Withal there has been a general cheapening of carrying cargoes, the average cost of carrying a ton of freight one mile now being less than one cent, whereas in 1865 the cost was upwards of three cents. With lower freight rates and quicker service, together with refrigerator cars and special facilities for carrying live stock and perishable articles like meats and fruits, the market for these has widened, their price has cheapened and become more uniform, and the cost of the necessities of life to the consumer has constantly tended to become lower.

Allusion was made to the division of the landed estates of France under Napoleon, by which agriculture was greatly improved, and also to the division by Henry VIII of England of the large landed properties held by the monasteries during the sixteenth century, and the beneficial effect of this division upon the commercial welfare of the kingdom. Under the English law of primogeniture the eldest son inherits the entire estate of his father, and as a consequence there are yet large bodies of land in England which have been held intact by a single individual and his descendants from generation to generation for hundreds of years, and which cannot be sold or divided. This is greatly to the disadvantage of the agricultural classes. To be able to own the

Land Tenures little farm which he tills is a great encouragement to the small farmer. He at once becomes interested in its proper and successful tillage, takes care of the improvements, and is decidedly a better farmer. The law of primogeniture and also the English doctrine of entailment, whereby a testator can limit or restrict the future ownership of an estate

*The time between Chicago and New York has now been reduced to eighteen hours.

to certain persons and their heirs, was introduced into this country as a part of the common law of England, from which our system of jurisprudence was borrowed. These laws were like a "dead hand" upon the land, sending it down for generations in the line of the eldest male. The aristocratic families in New York and south of Pennsylvania were favorable to these laws, as sustaining and perpetuating their leadership. Massachusetts abolished these laws of inheritance but recognized their spirit to a degree by giving a double portion to the eldest son, according to the Mosaic code, but divided the rest among the daughters as well as the sons, and this system prevailed generally throughout New England and also in Pennsylvania; but after the American Revolution, the founders of our republic, recognizing its injustice to a portion of the heirs of an estate, and its objectionable feature as a hinderance to commercial progress, chiefly through the efforts of Thomas Jefferson, abolished it. Estates in this country can be subdivided or transferred with ease, and are free from many of the prescriptive rights and entailments which prevent or hinder transfers of titles to land in the older countries. By a convenient system of surveying the land and dividing it into counties, townships and sections, located with reference to established meridians, and the recording of titles upon public books of record, the transfer of land is encouraged and made easy. This, we believe, has had a marked effect, upon not only the agricultural classes, by inducing thrift and industry, but also upon the general progress and commercial welfare of the nation.

To signalize the attainment of the one hundredth anniversary of the birth of the republic a great exposition was held in the city of Philadelphia in 1876, in which were exemplified the wonderful improvements in the industrial and mechanical arts made since the Crystal Palace exposition in New York in 1853. From the mammoth Corliss engine, which put in motion fourteen acres of innumerable steel and iron organisms, the visitor could

examine the processes of nearly every important manufacture on the globe. Numerous great palaces, each devoted to a particular department of human activity or achievement, were completely filled with extensive and interesting exhibits, from not only the United States but from all parts of the world. Egypt sent specimens of corn, cotton, sugar, woods, fruit, honey and perfumery; Australia sent wool, iron, wood, tin and agricultural products; Switzerland, her far-famed watches; Norway and Sweden, their glass work, wood carvings, porcelain, iron and steel; Holland, her excellent models of dikes and sea coast defenses, bridges and dams; China, her jars, vases and other ceramics; Japan, her porcelain and bronzes; Italy, her fine art contributions; France, her vases, statuary, textiles and wines; England, her woolens, cotton and silk goods, hardware, etc., and thus the infinite collection was made up, proving to be a vast object lesson upon the achievements of the race and the brotherhood of man.

The Centennial Exposition was only surpassed by the World's Columbian Exposition held in Chicago in 1893 to commemorate the 400th anniversary of the discovery of America. In magnitude and grandeur the palaces of the White City surpassed those of any exposition ever previously attempted. While the displays were commensurate with the beauty, variety and extent of the Palaces in which they were installed, the one great distinguishing feature of the exposition of 1893 was the display in

electricity. In 1876 the telegraph constituted almost the sole practical application of electricity to the utilities of man, but in 1893 we had the electric light in its varied forms, the electric motor for the propulsion of machinery and cars, the telephone and numerous other adaptations of this wonderful though subtle power. The one great lesson of this exposition was, that we had been, and were, passing through an age of invention. Thousands of examples were to be seen on every hand of inventions which multiplied

human control over natural forces. In the language of President McKinley at the Pan-American Exposition, his last public address, "Expositions are the timekeepers of progress. They record the world's advancement. They stimulate the energy, enterprise and intellect of the people and quicken human genius."

Through the inventive genius of man, manufactures have been cheapened during the past hundred years, while at the same time the price of labor has constantly advanced and the hours have shortened, thus greatly improving the condition of the working classes. In 1790 carpenters received 60 cents a day; in 1800, 70 cents; in 1810, \$1.09; in 1820, \$1.13; in 1830 to 1840, \$1.13 to \$1.40, and about the same up to 1860; in 1880, \$2.42; and in 1890, \$3.50, with the day shortened

Rate of Wages from ten hours to eight. Common laborers in 1790 received 43 cents a day; in 1800, 62½ cents; in 1810, 82 cents; from 1810 to 1820, something over 90 cents; and 1840 to 1860, from 87½ cents to \$1 per day.* While machinery has displaced hand labor, new industries have sprung up to furnish work for all willing hands, and the shortening of the hours, with better pay, has given workmen time and means for self-improvement and social enjoyment. Under the modern factory system men are brought into closer relationship with others, and as a consequence a higher standard of intelligence prevails. Low grades of labor are constantly giving place to educated labor, and what are luxuries to one generation become necessities to the generations which follow. This is illustrated by the fact that "there was a time when a linen sheet was worth thirty-two days of common labor, and a gridiron cost from four to twelve days' labor."

In 1898 the Hawaiian Islands were annexed and now form a territory of the United States. Their chief productions are sugar, coffee, rice and bananas, the principal export being raw sugar. The chief value of the islands, however, lies in the fact

*Wright's Industrial Evolution in the United States.

that they are situated at the crossing of the routes of ocean travel between America, Asia and Australia, and afford a convenient coaling and supply station for ocean vessels. As a result of the Spanish-American War, Spain ceded to the United States in 1899 the island of Porto Rico, one of the Antilles, and the extensive group of the Philippines in the Pacific. Porto Rico produces cotton, sugar, coffee, fine tobacco and tropical fruits. The climate is healthful, and the island will no doubt be greatly improved and developed by American capital. The Philippines are of volcanic origin, with mountain ranges predominant, but the valleys are adapted to tropical agriculture. The coast lands, plains and valleys produce large quantities of Manila hemp, raw sugar, tobacco and cocoanuts. The Manila hemp is of a superior quality, and the islands have practically a monopoly of the industry. The United States and Great Britain take nearly all of the crop. While the United States has for many years bought more than one-fourth of the Philippine exports, its share of the imports has been small. Under the new relation, however, as a territory of the republic our trade will no doubt greatly extend. The greatest value of the Philippines to the United States, however, will no doubt prove to be their proximity to Asia, and the aid they will afford in securing and carrying on an important and constantly expanding trade with China, where our manufactures are now being introduced.

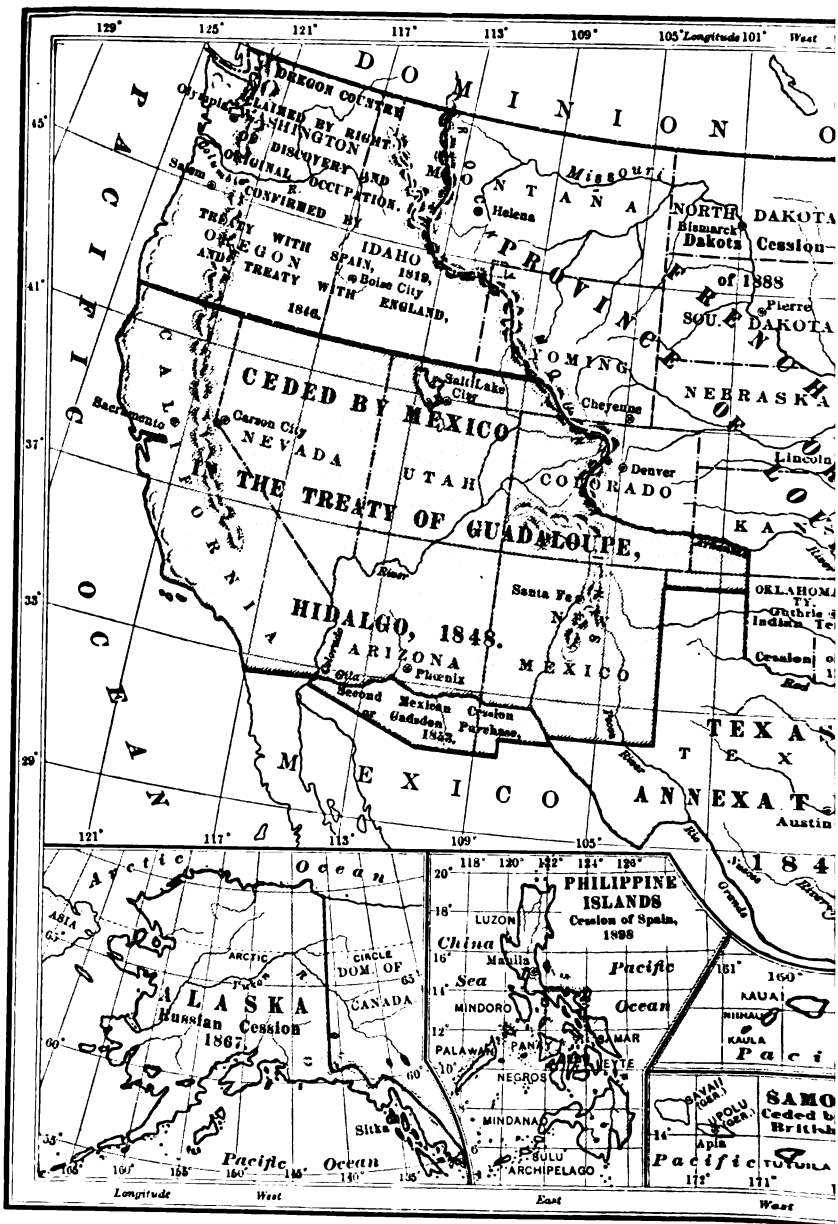
Our total export for the year ending June 30, 1907, amounted to the enormous sum of \$1,880,851,078, being the largest volume of exports during any year in the history of the republic. Of this sum nearly 65 per cent. were the products of agriculture, and of these breadstuffs, such as wheat, corn, rye, oats, barley, etc., amounted to \$184,120,702; raw cotton, \$481,277,797; provisions, comprising meats and dairy products, \$202,392,508; animals, including horses, cattle, hogs, sheep, mules and poultry, \$41,-

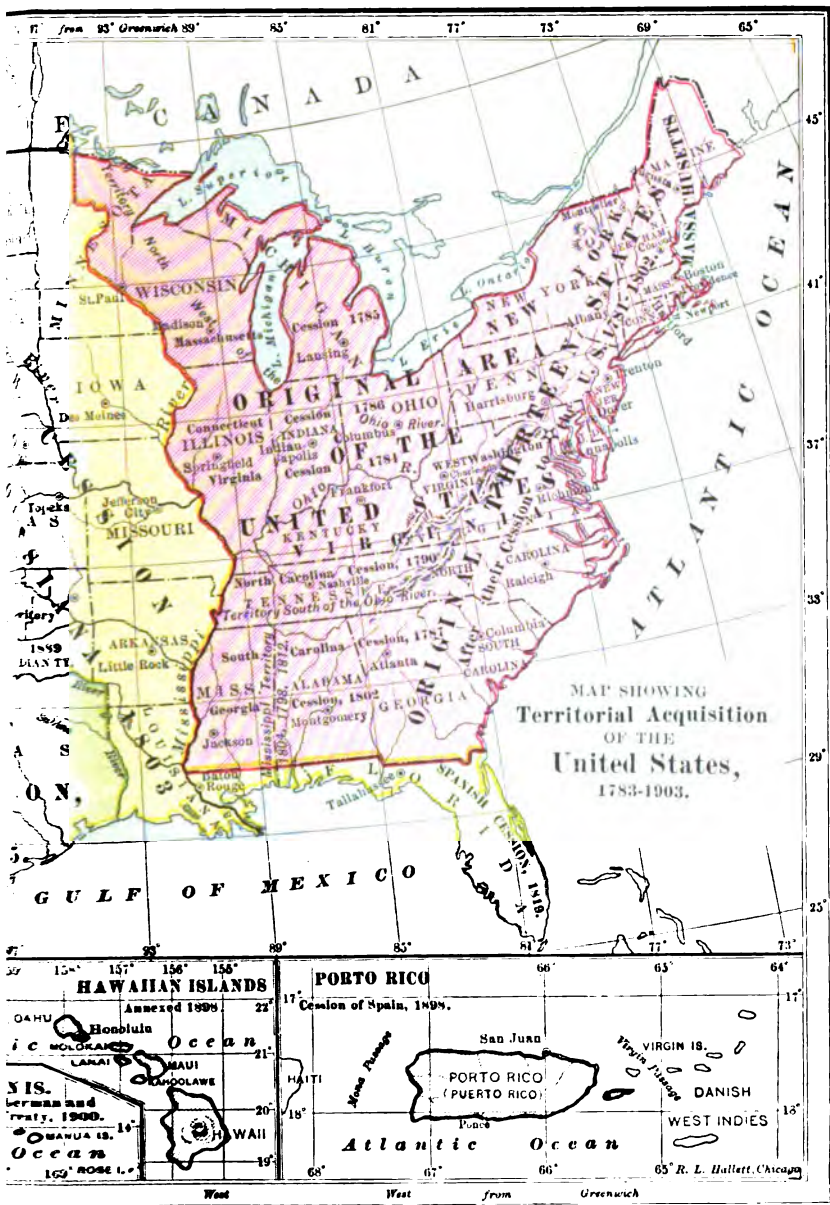
Present
Commerce

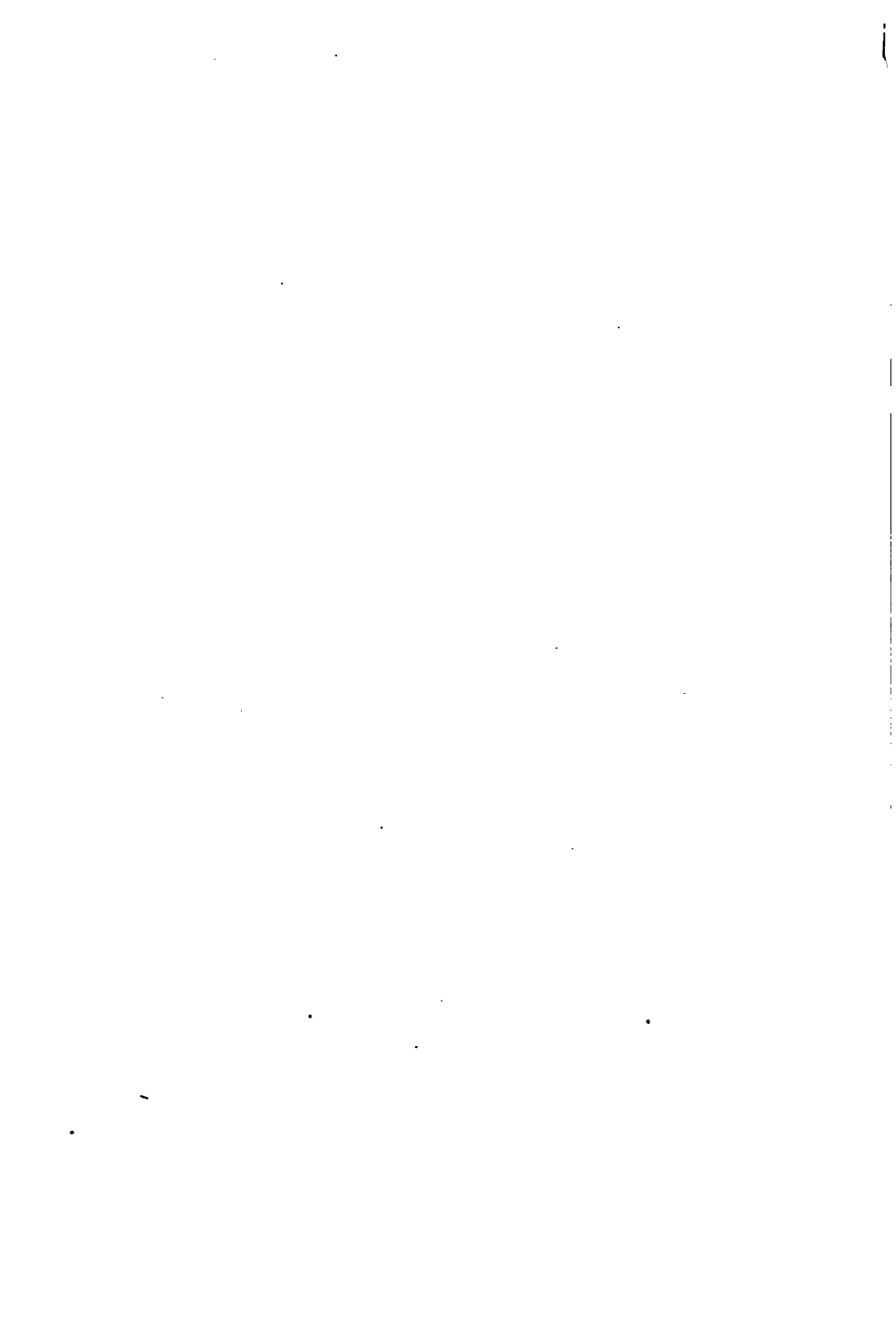
203,080; raw tobacco, \$33,377,398; oil cake, \$26,415,627. The exports from the products of our mines, including coal and mineral oils, amounted to \$42,000,000; of our forests, \$69,516,075; and fisheries, \$5,536,856. The total imports of the United States in 1907 amounted to \$1,434,421,425, leaving a balance of trade in our favor of \$446,429,653. The total manufactures of the United States now foot up annually \$16,000,000,000, which is about forty per cent. of the entire manufactures of the world. This enormous increase of manufactures* places the United States in the ranks of the great manufacturing nations of the world; and whereas heretofore our exports have been chiefly agricultural products, we may expect in the future a large increase in the exports of our manufactures. We are now supplying Europe with articles which we formerly imported, and American products are establishing a reputation for excellence in foreign markets. With the natural factors of production yet largely undeveloped and in no prospect of exhaustion, aided by the genius of the American inventor and the capacity and enterprise of the American business man, we believe the commercial future of the United States is destined to a remarkable development. Social and industrial problems may confront us, such as combinations of capital and labor, tariff and finance, but let us hope that these may all be wisely solved, and that as our commerce grows in greatness it may be governed by the principle of right.

*In 1870 our total manufacturing amounted to about \$4,250,000,000, or less than one-third of their present value.









MONEY.

CHAPTER XIV.

NATURE AND USE OF MONEY.

AS AN ELEMENT IN CIVILIZATION; KINDS; BARTER; ESSENTIALS OF MONEY.

Having traced briefly the history of the commerce of different nations and times, we shall now proceed to consider the nature and uses of one of the most important instruments of commerce, viz., money.

Under a republican form of government, where every citizen is interested as a factor in making the laws, either directly or indirectly, it is of prime importance that the subject of money should be understood. Under a clever play of words, politicians often deceive the masses and lead them into dangerous fallacies upon this subject, the result of which may be financial legislation of the most serious and perhaps disastrous character. Nothing which Congress can do will so directly and vitally affect the interests of the people for their welfare and happiness, or their discouragement and misery, as legislation upon this point, and likewise when questions of monetary policy arise in the executive branch of our government, the policy pursued by the president is of vital importance to the people. If, for instance, owing to changes in our financial policy there is a general rise in prices, debtors will gain at the expense of creditors; a tenant with a long lease at a fixed rental will gain at the expense of the landlord, and vice versa. Thus one class will receive greater benefit and advantage from the general wealth and prosperity of the country than another.

The immense power for evil which may be caused by a government changing the currency is aptly described by Lord Macaulay when he refers to the condition of affairs in England at the close of the 16th century, when the currency was debased by Henry VIII and Edward VI. He says: "It may be doubted whether all the misery which has been inflicted on the nation in a quarter of a century by bad kings, bad parliaments and bad judges was equal to the misery caused in a single year by bad crowns and bad shillings. The evil was felt daily and almost hourly in almost every place and by almost every class." A similar state of affairs existed in France after the Revolution, when the constitutional government flooded the country with irredeemable paper money. "What the bigotry of Louis XIV and the shiftlessness of Louis XV could not do in nearly a century was accomplished by thus tampering with the currency in a few months. Commerce was dead—betting took its place." Thus we see the importance of universal enlightenment upon this subject of money, if we would protect ourselves from the evils which result from ignorance.

Man in his primitive and barbarous condition lived upon the spontaneous production of the ground. Advancing a little in the scale of civilization, he made a few rude implements such as a bow and arrow, a spear and fish-hook by which he was able to better supply his wants. Thus far his individual needs were supplied by his own efforts or those of other members of his family or tribe, but as he advances a little higher in the scale of intelligence and his wants increase he learns that it is an advantage to exchange the products of his labor for those products of the labor of others which he does not possess. The hunter exchanges a carcass of meat or a skin, the product of the chase, for a bag of corn; the herdsman exchanges with the carpenter, the tailor with the fisherman, etc. This is called barter. This is the beginning of commerce.

Here is the commencement of "division of labor," that principle which has produced such a high degree of efficiency in the arts and sciences of our time. But observe the disadvantage of the system. The herdsman may have sheep to exchange for a coat, but the tailor may not need sheep, while the carpenter may need sheep, but the herdsman may not require the services of the carpenter, and thus the difficulty would always be to find a person willing to make the desired exchange. In the early stages of society when wants are few and simple the difficulties may be overcome, but as man progresses and his wants multiply, it becomes increasingly difficult for the members of the community to make satisfactory exchanges.

From the foregoing we see that exchange is a necessity of civilized life and in order to effect exchanges to any considerable extent a "medium of exchange" (money) is necessary. The earliest form of money was probably the skins of fur bearing animals, and these are still used as a medium of exchange among the Indians in the far northern part of North America. Dried fish, shells and beads were used as money by other Indian tribes. The early Greeks and Romans used cattle and wine as money. Our own history in colonial times furnishes numerous examples of various articles having been used as money, among which may be mentioned tobacco in Virginia and Maryland and corn in Massachusetts. The Pilgrim fathers found the aborigines using wampum as both an article of adornment and a medium of exchange throughout New England. It was a kind of bead made from a species of shell found in sea water. These beads were of different sizes and colors, and their value was correspondingly different. This species of money was an important factor in the early civilization of New England. It brought the furs from the north and west to the Massachusetts colonists and they in turn exchanged these for sugar, tools and other commodities with the English and Dutch traders. During the early settle-

Medium of
Exchange

ment of California by the gold seekers of '49, gold dust by weight was used as a medium of exchange.

Rising higher in the scale of civilization, we see the importance of having a better medium of exchange. It must be a commodity with great value in small compass. It must be something in universal demand, so that it will circulate widely; it must be something that is durable and will not suffer from decay or rust when stored or from wear when in use; it must be something that is divisible so that a great variety of denominations may be made for use in the multitude of exchanges large and small. All of these qualities point at once to the precious metals as the most suitable articles to constitute the money of civilized man. Gold and silver are sufficiently rare to embrace great value in small space; they are distributed over the entire globe, like the human race, and their quality is always the same wherever found. Besides, they are metals which can be readily used for other purposes than for coinage, in case there should be a temporary overproduction of them, so that their purchasing power may be said to be more uniform and universal than that of any other commodity. They are practically indestructible, being capable of resisting rust, and when combined with an alloy of harder metal, suffer little from abrasion. Gold may be refined, and alloyed, united and divided, with absolutely no loss whatever of the pure metal. Silver suffers a very slight loss under such treatment. It was soon discovered, too, that to reduce the wear and tear to the minimum the most convenient form in which the metals could be coined for use as money was round with flat sides to receive the inscription or stamp of value and milled edges to prevent clipping.

As previously stated, gold and silver are used extensively for articles of adornment and as jewelry, tableware, etc., and it is probable that their general usefulness as commodities first suggested their use as money. The fact must not be lost sight

of by the student of this subject that real money is a commodity, and the selling of corn for gold is an act of barter. The word barter is commonly used to signify the exchange of one article for another without the use of money, but it must be remembered that all trade is barter when the precious metals are employed as equivalents, since these are commodities. This important fact forms the basis for a correct understanding of the entire science of money.

It will thus be apparent that the coinage of a precious metal, while it changes its form, does not destroy its character as a commodity, and the exchange of the substance, whether coined or in its crude state, is an act of barter. In fact it is not necessary that the metal or other substance used as money should be coined at all. Gold and silver were used as money before they were coined. They were then measured by weight, and to avoid this inconvenience the stamp was put upon them indicating the weight, which, says Aristotle, was afterwards taken to indicate value also. All that coinage does is to save the trouble of innumerable weighings and assayings which would hamper trade and prove so troublesome and inconvenient as to largely destroy the usefulness of money as a measure of value. Another advantage in coins of the precious metals, early recognized, was their durability. There was serious shrinkage and deterioration in fish or tobacco, as money, and hides were not divisible, while all of these articles were not easily transferred or transported from place to place.

All writers agree that the essentials of a good kind of money are durability, portability, divisibility, homogeneity and uniformity in value. These qualities seem to exist in gold and silver to a greater extent than is embodied in any other two metals. Gold and silver, being commodities, are of course subject to some fluctuations in value, and silver especially has shown a marked change in value in

Money is a
Commodity

Coinage a
Convenience

Essentials of
Money

recent years, but on the whole these metals are nearest uniform in value—fluctuate less than other commodities. Divisibility is the quality which permits a metal to be divided without loss of value. When a \$20 gold piece is cut into a number of small parts, the sum of these will be \$20 less, of course, the few atoms lost in the operation of cutting, which are very insignificant. All parts of metallic money should be homogeneous, that is, of the same quality, so that equal weights will have exactly the same value. There may be different qualities of steel or iron, but of pure gold or silver there is only one quality.

As an instrument of commerce and an aid to the progress and welfare of man, money is indispensable. Without it division of labor to any considerable extent would be impossible; there would be little inducement to work when the products of one's labor could not be disposed of without finding persons who happened to want such commodities and have others to give in return that he himself would desire. The fact that there is in universal circulation a commodity, the holders of which are ready to exchange for the services of the farmer, mechanic, artist and inventor, is a stimulus to effort and industry, and brings thousands of products to market which could otherwise never have come into existence. The use of money tends to bring mankind into closer relations of inter-dependence, thus broadening the mind and character, and teaching indirectly the doctrine of the universal brotherhood of man. By distributing the products of labor over the earth's surface where and when they are needed, it is the means of banishing famine, while on the other hand the absence of money tends to isolate man. Isolation breeds suspicion and jealousy and these lead to strife, war, slavery and famine.

Money as an
Aid to Progress

CHAPTER XV.

FUNCTIONS AND KINDS OF MONEY.

FOUR FUNCTIONS; SUBSIDIARY COIN; COMPARATIVE VALUE OF SILVER AND GOLD; DEMONETIZATION OF SILVER, ETC.

Money has four functions, viz.: 1. A medium of exchange. 2. A measure of value. 3. A standard of value for future payments. 4. A store of value.

Money is as essential to the interchange of commodities as language is to the interchange of ideas. Without some common medium of exchange it would be absolutely impossible to carry on the manufactures and commerce of the country. The rude system of bartering one product for another as the parties may each need, is only adapted to a low civilization where wants are few and simple. The history of civilization and progress is concurrent with the history of money. The breaking up of feudalism in the middle ages, and the growth of commerce, was due largely to the introduction and use of money, by which the vassals were able to pay their rent in money instead of services.

In order to effect exchanges of commodities there must be an equality of values, and in order to establish this equality of values a measure of value is necessary. A measure of value in the exchange of commodities is as necessary as the yard stick or pound weight in measuring quantities. It is useless to convert all things into terms of money as a medium of exchange unless this is done at certain rates, for without fixing the rate or measure of value between commodities no exchange is possible. In this country the standard unit of value is the gold dollar consisting of a certain amount of gold and alloy fixed by act of Congress, and all values are measured in dollars or parts of a dollar. Al-

though the gold dollar is the standard, it is not necessary that all payments be made in gold dollars. We use silver, nickel, copper and paper as actual mediums of exchange, but of course they are all founded upon the gold dollar as the standard. A farmer agrees to pay a fixed proportion of his produce as rent, say one-third of his corn, but when the time arrives for payment he may, by agreement with the landlord, pay in gold, silver, paper, wheat, cattle or any other commodity, the quantity being measured, of course, by the value in gold dollars. In other words, the medium of exchange or payment may be different from the measure of value. We may measure in one thing, and pay in another. The medium of exchange would be useless unless measured in terms of the standard, and the measure would be useless without some medium of exchange by which the transaction could be carried out. A person having an article for sale desires to know what its value is, compared with other articles; that is, to have it measured by a common, recognized standard of value, but he also desires that, when he is ready to sell the article, there shall be a medium of exchange by which he can dispose of all, or as much of it as he desires, without having to resort to the primitive system of barter.

Since many contracts involve the payment of money at some distant future time it is essential that money should possess stability or uniformity of value. Suppose that in the case of a lease for many years the tenant agrees to pay a fixed rental in gold, and during the term of the lease the production of gold at the mines should be greatly increased—doubled, say. The result would be that the value of gold would diminish and its purchasing power would be reduced. Prices of other commodities would rise. A gold dollar would not buy as much of anything as it did before. Now the tenant would be able to sell his goods at higher prices but his rent would remain the same in dollars. In this case the landlord would suffer a disadvantage. Suppose, on

**A Standard of
Value for Fut-
ure Payments**

the contrary, that the mines failed to yield the customary amount of gold for a series of years and gold became scarce. Its scarcity would increase its value. Then a dollar of gold would have greater purchasing power and prices of other commodities would fall. The rent under this long term lease would remain the same, however, and the tenant must now pay his rent in dearer money. The landlord in this case would reap an advantage, as he would be getting a higher rent—the same rent nominally, but of greater purchasing power.

The whole fabric of the business world is made up of an endless series of contracts, many of them extending into years of futurity for their fulfillment, such as contracts for future delivery of goods, leases of houses and lands, hiring of services for a term of years, the settlement of estates of inheritance to be made upon the maturity of minors, or the payment of pensions, annuities or life insurance, and it is important in all such undertakings that the money which is our standard of value now, and the basis on which the contract is made, shall continue uniform and finally possess the same value or purchasing power at the end of the period of time for which the contract runs.

Were our standard of value such a commodity as wheat, an abundant crop would diminish its purchasing power and correspondingly raise prices of other commodities and vice versa to the serious injury of one class and the benefit of another. Fortunately for the commodity gold, which all of the most advanced nations have chosen as their standard of value, its production is remarkably uniform. The earth yields a constant and never-failing supply of the precious metal, not of such abundance as to affect its value or relieve man of the necessity of giving back value in labor for value in gold received, yet in sufficient measure to repay the effort in seeking and mining it. It costs substantially a dollar in labor generally to get a dollar's worth of gold out of the earth and coin it into money. Thus gold is

Time
Contracts

especially adapted to perform this function of the money standard of value for future payments.

Money may be said to perform a fourth function—that of a convenient means of storing value. When acting as a medium of exchange it circulates back and forth in the same locality, and may sometimes return to the same person, but at times a person desires to condense his wealth into small space and perhaps transport it to a distant country, or hoard it away for a time. Money in the form of the precious metals affords a convenient means of doing this. It is true that other commodities of small bulk, imperishable quality, and great value, such as diamonds or other precious stones, might be used for hoarding, and sometimes are, but their value is not affixed or stamped thereon, and their future value may not be uniform or stable. Gold coin is an exceptionally convenient means of hoarding or transporting money, and the facility with which it can be hoarded has a manifest tendency to beget economy and encourage accumulation, especially among the industrial classes. The large number of savings banks throughout the United States, with their enormous total of deposits and millions of depositors, is largely the effect of frugality and saving caused by the facility which the precious metals afford for hoarding or storing value.

Subsidiary coin or “token money” may be defined as coin, the nominal value of which as money is greater than its value as metal, even making allowance for the cost of coinage. When the government in 1834 changed the legal rate of silver to gold from 15 to 1 to the ratio of 16 to 1, making sixteen grains of pure silver equal to one of pure gold, the silver dollar then became of greater value than the gold dollar by $2\frac{1}{4}$ cents. Naturally people preferred to pay their debts in the cheaper metal, gold, and silver ceased to circulate. People who had silver on hand either converted it to other uses or sold it to brokers who melted it into bullion

A Store of
Value

Subsidiary
Coin

and exported it to other countries where its full value could be realized. We were then without silver for fractional currency, except worn halves, quarters and dimes which had lost $2\frac{1}{4}$ per cent. of their value by abrasion, and hence were equal in value to so many cents in gold. Then the increased supply of gold from California in 1850 caused a still further advance of $1\frac{1}{2}$ per cent. in the price of silver, driving still more of the white coin out of the country, and causing the remaining coins to be still lighter and smoother. To remedy this difficulty and supply the country with silver for fractions of a dollar, Congress in 1853 passed a law providing for the coinage of

Law of 1853

new silver half dollars, quarters, dimes and half dimes about seven per cent lighter than the former

ones. There being no inducement to melt these coins into bullion or export them, they circulated at par with gold (except during the suspension of specie payments), although their metallic value was considerably less than their nominal value as silver. This was the beginning of silver as subsidiary coin in the United States.

The price of silver continued to fall, as compared with gold, until 1874, but during all of this time no silver dollars were in circulation, silver being worth more than gold. In 1873 Congress passed an act demonetizing silver. The

**Demonetization
of Silver**

metal in the silver dollar at the time of the passage of the demonetization act was worth two

cents more than a gold dollar, but the price of silver has since continued to decline until it has become worth less than half its nominal value*. It now circulates freely as subsidiary coin, since the amount of silver coined and in circulation is limited and it is receivable for all public dues. Receiving it for public dues is one way of redeeming the coin. Besides silver we

*Congress passed an act in February, 1878, remonetizing silver, but notwithstanding this its value has continued to fall, and it only circulates at its nominal value because the Government receives it at the equivalent of gold at the custom house and tax office.

have subsidiary coin in the form of fractional currency, consisting of copper and nickel. These are redeemable by the government in gold when presented in sums of twenty dollars or more.

Paper money consists of printed promises to pay a given sum of money to the holder on demand. It is the government's promise to pay. It is not money, in reality, but

Paper Money represents money, and circulates instead of the actual coin. We call it money because it circulates from hand to hand and performs some of the functions of money, and because it will purchase our wants the same as money. It is redeemable or convertible into actual money on demand, and is issued either directly by the government or by banks under the authority of the government. There are several important advantages in favor of the use of paper money. It is lighter than coin and hence more convenient to carry in the pocket. Coin loses by abrasion, but paper can be readily replaced with new. Paper money can be sent through the mails or transported by express much more easily than coin.

Paper money may be divided into two kinds, distinguished on account of the origin of each, viz., Fiat Money and Representative money. These may be further subdivided as follows:

Paper Money	{ Fiat	{ Greenbacks
		{ Treasury Notes
	{ Representative	{ National Bank Bills
		{ Gold Certificates
		{ Silver Certificates

Fiat money consists of promises to pay by the government direct, or by banks under authority and control of the government, founded upon the faith of the people in the stability and credit of the government. Such bills are issued under a special law which limits the quantity, pledges the government to redeem them in gold on demand, and provides for a sufficient reserve fund of gold coin, to be kept on hand to redeem the bills in circulation.

The advantages of fiat money are that it enables a nation to increase its circulating medium rapidly, or temporarily, without increasing its stock of precious metals. The increase in the volume of coin must necessarily be made slowly, as the metal is mined and coined, but the demands of trade or the exigencies of war may require an increase in the volume of the money of the country to be made quickly. Now it has been found by experience that where public confidence in the government remains unshaken, a reserve of one dollar in coin is a sufficient deposit to maintain a circulation of three dollars in paper, on the principle that all the bills will not be presented for redemption at one time.

From the foregoing it must not be inferred that the government can create value or make as much money as it chooses.

**Government
Cannot Create
Value** The government can no more create value than it can create gold or coin. It may say how many grains of gold shall constitute a dollar or how many pounds shall constitute a bushel of corn. It may decree that a quantity of gold coin or bullion shall be deposited in the national treasury and it can, within certain limits, issue its paper promises to pay, representing this real money, but this is the extent of its power. If it exceeds this limit, and at times there have been strong temptations to do so, the result is inflation. The money begins to depreciate and falls below par. It circulates only at a discount, and cannot be exchanged for real money except at a loss. The people lose faith in it. Gold is driven out of circulation by it, because, according to the law of values announced by Sir Thomas Gresham three centuries ago, called "Gresham's Law," the cheaper money always drives out the dearer, people preferring to pay their debts with the cheapest money which their creditors can be induced, or by law compelled, to accept.

As seen from the foregoing, fiat money may be redeemable in coin, that is, it may be "convertible" into gold at the will of

the holder, or it may be founded only on the faith of the people in the stability of their government, or "inconvertible." The former is a convenience and aid to commerce, because it increases the circulating medium without impairing its stability. The latter is inflation and brings in its train serious financial and industrial dangers.

**Convertible
and Inconvert-
ible Notes**

Representative money consists of certificates of deposit issued by the government for gold or silver deposited in the treasury.

**Representative
Money**

These certificates circulate as money instead of the coin which they represent. The coin can be had by the holder of the certificate upon demand. The representative money of the United States consists of gold certificates and silver certificates. The theoretical difference between these and greenbacks or treasury notes is that the latter is issued in excess of the redemption fund on which they are based, while gold and silver certificates can never exceed in amount the coin on deposit.

CHAPTER XVI.

THEORIES OF MONEY.

COINAGE; VOLUME OF MONEY; SUBSTITUTES; MONOMETALLISM; BI-METALLISM.

Coinage is the process of manufacturing bullion into money of proper form, weight and fineness. This is done only by the government, at its mints. Private individuals are not permitted to coin money, owing to the inducement which would exist for the practice of fraud and the ease with which it could be practiced. In ancient times kings (notably Henry VIII, the first Defender of the Faith) debased the coin of the realm and thus cheated their subjects to enrich themselves, but in modern times money is as accurately coined as human skill is capable.

Gold and silver circulate between different countries by weight, simply as merchandise, the risk of being defrauded by inferior quality or adulteration being left entirely to the receiver of the metals, but in domestic commerce the majority of people have not the skill nor facilities for weighing or determining the value of coin received in every transaction, hence the enormous convenience to have each coin certified as of proper weight and fineness by the highest authority.

Within the sphere of the subject of coinage Congress must:

1. Fix upon the metal to be the standard of legal money.
 2. Establish a unit of value.
 3. Fix the weight and fineness of the unit and of other pieces, its fractions and multiples.
 4. Choose proper inscriptions for the various coins.
 5. Determine the weight, fineness and value of all coins of other metals used as money, compared with the standard.
 6. Decree how much money shall be coined.
- In passing upon these questions at different times, our Congress

Duties of
Congress as
to Coinage

has finally established gold as the standard, one dollar as the unit, 25.8 grains as the weight, and nine-tenths pure as the fineness, and made its coinage free and unlimited; that is to say, all who bring gold bullion can have it coined by paying the mint charge, or seigniorage. Congress has decreed that a silver dollar shall consist of $412\frac{1}{2}$ grains of silver nine-tenths pure, and that its coinage shall be restricted.*

It is customary to attribute most of our financial ills, such as depression in trade, "hard times," lack of employment and low prices to a scarcity of money, and to believe that relief lies in starting the mints to work or the printing presses to turning out bills. With a desire to be useful to their constituents our legislators often undertake to cure the afflictions and poverty of the people by tampering with natural laws in the financial world, with the result, however, that they only aggravate the difficulty. The question then properly rises, how much money does a nation really need? To answer this is exceedingly difficult, since a number of elements enter into the problem, some of which are very difficult to ascertain. First of all, the volume of money which a nation needs will depend upon the size of its population, since the greater the number of persons engaged in trade the greater the amount of money required to conduct that trade. Then again the amount of money must depend to a considerable extent on the commercial activity of the people. A highly organized nation will require more money per capita than one of fewer activities. The more business done, goods manufactured, bought and sold, the more money a people will require as an instrument of trade and commerce. The value of the goods also will affect the question, and the higher the price of the goods the more value changes hands, and hence the more money will be required to represent that value and affect its changes. Now the

*At this point let the student ascertain what amount of silver is now being coined and under what restrictions.

amount of a nation's foreign commerce is easily ascertained since it must pass through the ports of entry, but the volume of inland traffic, the innumerable transactions carried on between citizens of the same country (and this is by far the larger part of a nation's commerce) cannot be estimated accurately. Hence some of the data which enters into the question of the volume of a nation's money cannot be supplied.

It is also apparent that the rapidity with which money circulates has an important bearing upon the question of volume.

**Rapidity of
Circulation**

A "nimble penny" will do more business than a sluggish dime. A dollar which changes hands ten times serves as a medium of exchange equal to ten dollars in one exchange. In these days of quick transportation of goods and rapid interchange of commodities and information among the people, the volume of money would necessarily need be very large were it not for the substitutes which have been devised to take its place.

The substitutes for money in a modern, highly civilized nation are checks, drafts, money orders, certificates of deposit and promissory notes. These are representatives of money, and

**Substitutes for
Money**

by their use an immense volume of business is transacted without the handling of any real money.

The general intelligence of the people by means of which they are able to properly and safely use the various forms of business papers, an extensive banking system by which every town of any importance is provided with banking facilities, the bank clearing houses in all of our large cities whereby the exchanges between banks are effected with the use of but a very small fraction of actual money—all these, the machinery of finance—combine to reduce the need for a large volume of the circulating medium.

The average daily transactions in the Bank Clearing House of London is £34,000,000 which if paid in gold coin would weigh about 364 tons, and would require fifty heavy, two-horse

drays to transport it. If paid in silver it would weigh 5,150 tons. The clearings in the New York Clearing House average daily about \$250,000,000, and yet this vast volume of transactions is settled by the use of less than 5 per cent. of the amount in actual coin or legal tender notes, and even this amount, except for sums less than \$5,000, is often paid by means of clearing house certificates.

When business is prosperous, that is when a large volume of sales are made or goods manufactured, so that a greater quantity of money is required to carry on the commerce of the country, gold is attracted from abroad, and like other commodities, seeks the place of strongest demand. Like water, it seeks its level. On the contrary, the history of the past teaches us that when trade slackens and a smaller volume of the circulating medium only is required, if the several kinds of money are founded on gold as a standard, or are redeemable in gold, there will be an outflow of gold until the excess is relieved. But if on the other hand the circulating mediums are not upon a gold basis but are in the nature of fiat money, there will be a general depreciation of the whole volume of the currency. Thus the law of supply and demand affects to a certain extent the quantity as well as the value of a nation's money. Then again the volume of money in circulation affects the prices of all other commodities. A scarcity of gold means low prices of all commodities measured by gold, because the scarcity of any commodity makes it dearer, and the dearer gold is the greater its purchasing power—the more things it will buy. And the more plentiful gold is, or other money equivalent to or redeemable in gold, the lower will be the prices of all other commodities, because money will be cheaper, and will purchase less. Fluctuations to any considerable extent in the volume and value of the money of a country, especially if sudden, must necessarily be very injurious to the welfare of the people, because they unsettle values and make the future of time contracts uncertain.

From the foregoing we may conclude that the volume of a nation's currency is not necessarily a measure of its wealth, and that the wisest and safest method of regulating the amount of money in circulation is to leave it perfectly free to follow the inevitable laws of supply and demand. As a nation grows older its laws more stable, wise and just, it will attract money from other nations, as well as add to its supply by the product of the mines, and its volume of money gradually increases to meet the requirements, the same as the amount of wheat or cotton raised.

Monometallism consists in fixing upon a single metal as the standard of value. The two metals chiefly used as money are gold and silver. Of these silver is more widely
Monometallism and plentifully distributed than gold. It is usually formed in larger deposits and is more easily mined, hence its value is much less than that of gold. If the relative commercial values of the two metals would always continue precisely the same, the government could ascertain that value and fix the legal ratio accordingly, but the production of the two metals does not continue uniform, and hence their values are subject to change. An increase in the output of silver or a decrease in the production of gold, or vice versa, causes the commercial values of the two metals to fluctuate and thus change the actual or commercial ratio between them. Now, according to Gresham's Law, as before explained, when two metals are legal tender, and one is cheaper than the other, the cheaper invariably drives the dearer out of circulation, because a debtor will always pay in the cheapest coin which his creditor is compelled by law to receive.

From the establishment of our coinage system in 1792 until 1873 gold and silver were both legal standards of value, coined in unlimited quantities. The ratio from 1792 to 1834 was 15 to 1, but since the commercial value of silver was slightly below this ratio, gold was gradually driven out of circulation and so

continued almost without interruption until in 1834. In 1820 Mr. Raguet wrote to the "National Gazette" to explain the reason for "the disappearance of gold from the United States." Two years later he wrote on the same subject, saying that "although the coinage of gold continued to be large (\$1,319,030 in 1820) not a gold coin was anywhere to be seen in circulation." The gold was exported as fast as the mint turned it out with its weight and fineness fixed. To change this state of affairs Congress in 1834 changed the ratio to 16 to 1. This ratio overvalued gold and thence it became the cheaper money. Silver was driven from our shores, and fractional coin was kept in circulation only by making the half dollar, quarter dollar and dimes short in weight. In 1873 silver was demonetized, leaving gold as the sole standard, and reducing silver to the position of subsidiary coin. In this capacity it now circulates with gold. The argument of the monometallists is that in no other way can both metals be kept in circulation than by making one a standard and the other subsidiary coin. History seems to support their contention.

England adopted the gold standard for herself and her colonies, including Australia, in 1816. Germany demonetized silver and went to the gold standard in 1871. Her example was soon followed by Denmark, Norway and Sweden. The gold standard also exists in Portugal, Turkey, Egypt and a few South American states. The silver standard prevails in Russia and Austria in Europe; China, India, Central America and Mexico.

Bi-metallism means the use of two metals, gold and silver, as standards of value. Those who advocate bi-metallism contend that there is not sufficient gold to supply the money need of the world, and that if the gold standard were universally adopted it would cause a gold famine which would be exceedingly disastrous to the financial welfare. It is further contended that by placing the

Single
Standard
Nations

Bi-metallism

entire burden as a standard of value upon one metal the use and importance of that metal is accordingly augmented and its value increased, causing a corresponding decline in the values of all other commodities.

But the strongest argument in favor of the double standard is that one metal acts as a check upon the fluctuations of the other. If two metals are equal as money standards, and one, for instance gold, should rise in value, this would bring the cheaper metal into more active use, thereby relieving the pressure on gold, or lessening the demand for it, and causing it to fall. Likewise if silver should become dearer, gold would be more extensively used in making payments instead of silver, thus bringing the two metals nearer an average of value and maintaining that uniformity which is so important as a measure of value. The bi-metallists contend that the uniformity of value of our standard is of far more vital importance than having the two metals circulate together, and that the lack of one metal in circulation can be supplied by other forms of money if necessary. The question may yet be regarded as an unsettled one among nations, with the tendency principally in the direction of the gold standard. The countries now having the double standard are France, Italy, Belgium and Switzerland, constituting what is known as the "Latin Union," Spain, Greece, and a few South American states.

HISTORY OF BANKING.

CHAPTER XVII.

PRIMITIVE BANKING.

**BANK OF VENICE; AMSTERDAM; WISSELBANK; BANK OF FRANCE;
FRENCH SYSTEM.**

Banking, as we understand the term, had its origin in the Italian cities during the middle ages. Prior to that time "bankers" were merely money changers, who set up their banks or benches in the streets or market places of the cities of the Orient. Money changers were numerous in the cities of Greece and Egypt. They kept no books, received no deposits, made no loans, sold no drafts or bills of exchange and issued no circulating currency, hence they scarcely possessed any of the real functions of a bank. But when prosperity came to the cities of Italy, and their ships were upon every sea, the merchants found need for other and better facilities in their financial operations, and hence was gradually developed the first banking institutions. The first bank, however, that of Venice, had a peculiar origin. It was founded in 1171 as a combined result of governmental necessity and tyranny. The republic needed money to carry on its wars with Genoa, and levied forced contributions upon the leading mercantile firms and wealthy citizens, in return for which they were given perpetual annuities at a fixed rate per annum. The payment of this annual interest was the means of establishing the bank, and as the annuities were often transferred from one holder to another, or passed by devise or descent to heirs, the transfer was made upon the books of the bank, the same as in the case of the transfer of the stock of a corporation at the present time.

Finally, to avoid the frequent and numerous entries on the books of the bank, certificates payable to bearer were issued and passed from hand to hand, the same as bank bills of the present day. A little later bills of exchange were introduced as a means of transmitting money safely through provinces where property was unsafe from robbers and barbarians, but it was not until three hundred years later (1487) that the system of banking thus begun had developed to the point of deposit banking, and the issuing of circulating notes by this same bank. The Bank of Venice played a great part in the commercial history of its time, proving a vast aid to both the government and the mercantile houses, and yet it answered very imperfectly the modern definition of a bank.

During the sixteenth and seventeenth centuries the commerce of Holland supplanted that of the Italian cities, and Dutch ships were carrying the produce of the world. Amsterdam then became a commercial and financial center. For a time the commerce of the world seemed to focus there. Foreigners came to buy, and found the products from all parts of Europe, Asia and the East Indies, carried thither in Dutch ships. Money flowed into Amsterdam from foreign countries in payment for goods and shipping charges, and this stream of payments made it convenient to settle in Amsterdam the financial transactions of other cities, such as Antwerp and Rotterdam. Thus Amsterdam became a commercial clearing house for the world's commerce, the same as London and New York are at the present time. Bills of exchange came into Amsterdam for collection, and the volume of financial transactions rose to a large figure. Such a concentration of dealings in money could not fail to develop a convenient system of banking. "Individuals began to deal in foreign exchange and to buy and sell coin and bullion; and, sometimes in connection with the exchange business, and sometimes independently of it, began to receive money on deposit, and to effect

**Amsterdam as
a Financial
Center**

payments, when ordered by customers, by transfer from one account to another." Thus the business of banking gradually developed to meet the requirements of commerce until by the middle of the seventeenth century it is probable that many of the functions exercised by a modern bank were in use, except the issuing of a circulating currency.

A great variety of coins were in use in the different Dutch provinces, and to these was added the influx of gold and silver of various weights and values from other nations in the regular course of foreign commerce. The **Establishment of the Bank of Amsterdam** **1609** rixdaler was the standard of value, but a large portion of the coins in circulation was light in weight, either from abrasion, clipping or debasement. Kings were accustomed to debase the coinage in order to replenish the public revenues. As a consequence the coins of full weight disappeared constantly, leaving the inferior pieces in circulation. Instead of attempting to regulate the coinage itself, the city fathers of Amsterdam ascribed the confusion in the circulating medium to the free banking privileges which prevailed, and attempted to correct the evil by regulating the dealings of private bankers. Their first law was leveled against deposit banking, and by the act of July, 1608, deposit holding was absolutely prohibited, and the receiving or paying out of money for another person, or its transfer by writing, "or by word of mouth, directly or indirectly" was forbidden. The use of bills of exchange was also strictly forbidden. The culling of coin, or selecting the heavy coin from the light was also strictly forbidden. Thus did these ancient law makers display their ignorance of the laws of trade and finance, and while attempting to correct evils which they did not understand, only served to retard the wheels of commerce. Finally they decided to create a great financial institution, which should concentrate under public authority the business of receiving deposits and dealing in specie, and as a result, in 1609, was established the Bank of Amsterdam, more properly called the

Amsterdam Wisselbank (i. e. Amsterdam Exchange Bank). The bank created several agencies or branches in different parts of the city, and thus, under the law, monopolized the business of banking and dealing in money and exchange.

The advantages offered by the Wisselbank to the commercial world, of which Amsterdam was the center, were security for deposits and a uniform value in its transfers; and while the multitude of debased coins continued to circulate in the channels of trade the same as before, the deposits in the bank were a standard of value. The bank received only money of full

**Advantages of
the Bank**

weight and paid out only such, hence a credit upon its books was equivalent to so much good coin. Credits in the bank were frequently transferred, and came to be called "bank money." Payments made in "bank money" were preferable to payments made in "current money," owing to the established value of the former. Such payments or transfers were made by means of orders required to be presented by the payee in person, or his authorized agent, but the payee did not receive the credit for the transfer until the following day. This is the first exemplification of the check system, but it fell far short of its modern uses. Even this, however, was a great convenience to the commercial public. The law required that all Bills of Exchange payable in Amsterdam should be settled for by transfers in the bank, and this had the advantage of assuring foreign holders that exchanges on Amsterdam would be paid in standard money, thereby giving stability and uniformity to exchanges and encouraging foreign trade.

Every merchant was obliged to keep an account with the bank in order to pay his foreign bills of exchange, and once having made a deposit it was to his advantage to continue it, because the moment he withdrew his money and mingled it with the current money in trade, from which it was not readily distinguishable, it fell in value to the level of the current

money. "While it remained in the coffers of the bank its superiority was known and recognized, but when it came into the hands of private individuals, its superiority could not well be ascertained without more trouble than the difference was worth" (Adam Smith in *Wealth of Nations*). The difference in value between money in bank and current money sometimes reached as high as nine per cent., but was usually about four per cent., and this (called the *agio*) the depositor lost by withdrawing his deposit.

**Advantages of
a Deposit**

In 1683 the bank established a system of making advances upon deposits of coin. Under this system a depositor was allowed to withdraw an amount of bank money not far from the value of the specie, and upon this he was charged interest. These advances were commonly made for a period of six months, and in case the borrower failed to renew or pay the loan at maturity, the margin of his deposit over and above the amount of his withdrawal was forfeited to the bank. The business of advances upon specie deposits grew in the eighteenth century to an enormous volume, and completely superseded the earlier practice of simple deposit. Then the administrator of the bank began to permit individuals at times to transfer more bank money than their deposits of specie warranted, which was equivalent to giving permission to overdraw.

**Advances on
Deposits**

Mismanagement and a diminishing commerce are the causes which, after two hundred years of useful services, led to the decline of the *Wisselbank*. Wars and the growth of manufactures had changed the channels of trade, and Dutch ships no longer possessed a monopoly of the carrying business. The center of the financial world moved westward to London, and the Bank of England was coming into prominence as a great financial agent. Besides there had come about a desire for an improvement in the system and methods of banking to conform more to the

**End of the
Bank**

requirements of commerce, a larger scope in bank functions, and the Bank of England was more in conformity with this idea. The Wisselbank was finally dissolved and went out of business in 1819. The present Bank of the Netherlands, which may be considered its successor, was founded in 1814 with authority to make loans upon commercial paper and other public securities. It is also the bank of issue of the currency of the Netherlands, and keeps the funds of the state and the cash of the postal savings banks. There is no limit upon the circulation of the bank, but the law requires that it must be secured by a reserve of two-fifths of the aggregate of the circulation and demand liabilities. This reserve consists chiefly of gold.

The Bank of France was established in 1800, the First Consul being one of its original stockholders. In 1803 its scope was enlarged and it was endowed with the exclusive privilege in Paris of issuing circulating currency, a monopoly which was finally extended so as to cover the whole of France, and which it still enjoys. In some respects the bank is the greatest of financial institutions, and enjoys a reputation for solidity at home and abroad. While

**The Bank
of France**

the Bank of France is the only one of issue, there are numerous private banks in Paris and scattered throughout the country which do a general deposit, discount and exchange business. The capital of the bank is 182,500,000 francs, and its circulation limit is 5,000,000,000 francs—the greatest of any financial institution in the world. While nominally a private banking house, the Bank of France is really a semi-official institution, for the reason that, being a monopoly, its operations are under government control. The management of the bank is vested in a board of fifteen regents and three inspectors or auditors, but the governor and two deputy governors are appointed by the Chamber of Deputies. Only the 200 stockholders who hold the largest number of shares are allowed to attend the annual meeting and participate in the election of officers. French states-

men believe that private ownership of the bank is an advantage, since it and the government have thus been enabled to be of assistance to each other at various times, in financial and political crises. M. Thiers said, "The bank saved us because it was not a state bank," by advances when the government was hard pressed, as in 1871. On account of its issue of the circulating medium, the impression prevails among the uninformed people of France that the bank is a government institution, and it is respected as such, but business men know that while this is not the case, the government could not allow it to fail, and that behind it is the fortune of the nation. The note issue is regulated by law, and has been gradually increased until it has reached its present enormous volume.

The functions of the bank as prescribed by law are: "To issue bank notes payable on demand; to discount bankers' drafts and commercial bills, drawn at a fixed period not exceeding three months and bearing the names of business people and others well known to be solvent; to collect bills remitted them by private parties or public establishments; to receive in account current sums for deposit with the bank by private individuals or public institutions, and to pay amounts drawn to the extent of the funds deposited; to keep a record of voluntary deposits of all securities, bullion and all kinds of gold and silver money; to make advances upon French bills and French securities, upon bullion and foreign coins, in accordance with a certain proportion fixed by law and the terms fixed by the statutes of the bank; and, finally, to deliver to any person applying therefor orders from Paris to their branch offices, and orders on Paris from the branch offices."

**Functions of
the Bank**

The bank does an extensive business in discounting short time commercial paper, according to the above-mentioned regulations, but its business in this line is considerably hampered by its rule which requires three names to each paper. This compels many merchants to discount their paper through brokers

or private bankers, who, after endorsing it, re-discount it in the Bank of France.

To satisfy the demand for banking facilities in the provincial towns of France, the bank is required to maintain in each department (equivalent to a state) in the republic, a branch with a capital allotted to it by the parent institution in Paris. These branches, which now number more than one hundred, are conducted under the supervision of the head bank, and can engage in no operation with other banks or with each other without special leave. Their business, even to the rate of discount, is directed in Paris, and not with reference to local wants. The local

Branch Banks managers are frequently strangers sent from Paris and are not in close sympathy with the business public. Nevertheless the branch banks discount a large amount of commercial paper, besides issuing bills of exchange, collecting government revenues, stamp duties, etc.

The note issues of the Bank of France are regulated by law. The volume has been increased from time to time until now the limit is 5,000,000,000 francs, with an actual circulation of about 3,600,000,000. This large circulation of the bank is, according to Conant, in a measure due to the large quantity of silver in the reserve of the bank. The bank has made repeated and continuous attempts to force its five franc pieces into general circulation, but they constantly and persistently flow back to the bank, the people preferring paper currency based upon the gold and silver

Circulating Notes reserve in the bank vaults. The circulation of the bank is divided into two classes, denominated as "productive" and "non-productive." Notes issued to meet the demands of commerce, and which are secured by discounted bills, are called productive, probably for the reason that interest is earned, and are subject to a tax of 50 centimes per 1,000 francs, while those issued against specie or bullion are called non-productive, and pay a tax of 20 centimes per 1,000 francs. As soon as a bank note passes into circulation it is a

legal tender for all debts, public and private, so long as the bank maintains specie payments. They are guaranteed by gold or silver coin, by loans made upon gold or silver bullion, by securities or public funds, by loans made to the government, or by drafts discounted upon the terms prescribed by law.

The Bank of France has the option of redeeming its notes in either gold or silver, and it does it in whichever metal seems most advantageous at the time. In case a note-holder desires gold when silver is offered him, or vice versa, the bank exacts a small premium, as a compensation for paying in the other metal. It has been the policy of the bank to keep on hand a large gold reserve and prevent the exportation of the yellow metal as far as possible. This has been done by charging a premium on gold for export. The gold reserve in the Bank of France is, in round numbers, 2,500,000,000 francs, or about one-half the authorized limit of circulating notes. The silver reserve is in the neighborhood of 1,000,000,000 francs. There is no law fixing the amount of coin reserve, or proportion of specie to be held against the notes in circulation. In a time of crisis the government can give the notes of the bank a forced circulation, in which case the bank would be relieved from the necessity of redeeming its notes in coin.

The enormous volume of the circulating medium of France is necessitated to a considerable extent by the fact that it is a country of small traders, as well as small farmers, and the minute division of properties and enterprises is not favorable to the use of bank checks to the same extent as in countries where industries are more consolidated and centralized. Then again the masses of the French people are not educated in the use of checks, or accustomed to their use as we are, and are conservative in their habits in regard to changing long-established methods, and hence adhere to the old way of using the actual coin or bank notes.

**Redemption
of Notes**

**Volume of
Money**

The French people, therefore, require a large amount of cash for the transaction of their daily business, and accordingly we find that France has the largest volume of both gold and silver as well as paper money, in proportion to the population, of any of the great nations.

The banking of France is remarkable as an example of the free organization of a financial system under general laws, and without those restrictions and provisions for the safety of all bank debts, especially circulating notes, which in other countries has come to be regarded as essential to a stable currency. Here is a great bank authorized to discount paper, receive deposits and issue circulating notes, but without any special provision for the safety of one class of liabilities rather than another.

No Special Liability for Note Circulation

All liabilities of the bank are upon the same footing and equally a charge upon its general assets. The Bank of England existed in this

manner until 1844, and banking in the United States was conducted under the same condition up to the period of our National Banking Act, but in both these latter countries public opinion has required important modifications in the law for the safety of creditors and note-holders.

CHAPTER XVIII.

ENGLISH BANKING.

BANK OF ENGLAND; PEEL'S ACT, 1844; ONE RESERVE; BANKING AND ISSUE DEPARTMENTS.

After the industrial revolution which set in during the latter part of the eighteenth century, England took first place, commercially, among the nations of Europe, and London became the financial capital and center of her growing commerce. As the trade of Amsterdam declined, that of London increased, and as wealth accumulated, England gradually became a creditor nation, loaning and investing extensively in various parts of the world. She is at the present time the great creditor nation of the world, loaning through the bankers of London large sums to foreign governments and citizens. These loans and investments necessitate the return of interest and dividends to the bankers of Lombard Street, in the aggregate amounting annually to many millions of pounds. Many of the largest transactions in the world are settled in London, and the world's supply of gold there finds its natural point of distribution. London has thus become, practically, the center of the exchanges of the world, and is not inappropriately called the "World's Clearing House." Whether this condition of affairs is due to the general westward course of empire and commercial development; to the freedom of the British Isles from invasion and the ravages of war; to the genius of the people for finance and commerce; or to the money system and the Bank of England itself, or all of these combined, is not easy to determine, but there are many Englishmen who would ascribe it chiefly to the Bank of England. Certain it is, that the Bank of England is the center around which the commercial and monetary systems of the British Empire revolve, and the support

London as
a Financial
Center

of the whole fabric. The Bank of England, although a highly privileged establishment, is not a government institution. It has practically a monopoly of the note issuing power, and its notes are the only legal tender currency of the United Kingdom. It is the chief depository of a government which has no public treasury. It keeps the registry of the public debt, issues the consols and pays the interest thereon, and yet, withal, it is only a private corporation, subject to no government inspection or control, and managed by a board of directors who are alone responsible to the stockholders, the same as in the case of other corporations.

The Bank of England was founded in 1694 in very much the same manner as the Bank of Venice—as a result of the financial straits of the government. William and Mary were in sore need of funds to prosecute the wars against Louis XIV. Their treasury was empty and their credit weak. The increasing wealth of the country since Elizabeth's reign had been the cause of a large number of private banks springing up in London and other parts of the realm, each issuing its own notes to whatever extent they would be accepted by the public. The necessity for a great central bank, similar to that of Amsterdam or the Italian cities, was becoming apparent. The government desired a popular loan of a million sterling, and William Patterson, a Scotchman, crystallized the idea by proposing that Parliament should ask a

Origin of
the Bank of
England

loan by public subscription, and in order to make the proposition attractive, include a grant of incorporation, with banking privileges to be enjoyed by the subscribers and their successors. In this way £1,200,000 was raised at eight per cent. interest, and the subscribers were incorporated as the "Governor and Company of the Bank of England," with that amount as a capital.

The bank was to have the privilege of issuing notes, keeping the accounts of the public debt, and of transacting a general banking business, with almost a complete freedom from restraint.

The entire capital was loaned to the government and thus the bank had a revenue of nearly £100,000 at the very outset of its career. It began at once to issue circulating notes based upon the government securities which it held, another productive source of income. These bills, however, were only transferable by endorsement, like ordinary promissory notes, and bore interest—two conditions which must have confined them to a very limited circulation. Three years later the bank was compelled to suspend specie payment, and the necessities of the government were such that in consideration of the stockholders advancing another million pounds to the government the bank's charter was modified. The new charter authorized the issue of notes payable to bearer on demand, thus laying the foundation for the present system of Bank of England notes. It also gave the corporation a monopoly of the banking business in the kingdom by providing that no other bank, or corporation in the nature of a bank, should be allowed to carry on business in the kingdom. The rate of interest on the government loan was then reduced to six per cent. Further loans to the government and corresponding additions to its capital were afterwards made by the bank from time to time, until in 1722 its capital stood at nearly nine million pounds, with a handsome surplus (called the "Rest"), which enabled its dividends to be made uniform. In 1782 its capital had risen to more than eleven millions and a half, and in 1816 it had further increased to £14,553,000, or about \$72,000,000, at which figure it has stood ever since. Its loans to the government increased almost as its capital enlarged, but in 1834 the government paid about one-fourth, reducing the total to £11,015,100, which is its present amount. The interest has been reduced from time to time, until it has reached the present rate, $2\frac{1}{2}$ per cent.

The monopoly of the Bank of England, dating, as has just been stated, from 1697, was modified in 1742 so as to permit

Growth of
the Bank

partnerships having six persons or less to issue circulating notes, and allow companies or partnerships of more than six persons to perform other functions of a bank. Under this law private banks were formed and notes were issued quite extensively during the latter half of the eighteenth century. About the year 1772 the check system was devised and brought into use, and proved such a convenience that many of the London banks discontinued the issue of notes. In 1826, owing to the general demand for better banking facilities throughout the kingdom, and the slowness of the Bank of England in establishing branches, Parliament passed an act giving to companies of more than six persons the right of issuing notes, when established at a greater distance than sixty-five miles from London, thus limiting the monopoly of the Bank of England in territory. Then in 1833 the law was again amended so as to permit companies and partnerships, although composed of more than six persons, to carry on the business of banking in London or within the sixty-five mile radius, provided they did not issue circulating notes. This act was followed by the formation of numerous joint-stock banks in London as well as throughout neighboring towns, and banks of issue began business beyond the sixty-five mile limit. The London and Westminster Joint-Stock Bank, one of the leading banks of London at present, was founded at this time (1835).

Thus matters progressed until the accession of Sir Robert Peel to the Premiership of England, and the question of the renewal of the bank's charter in 1844. The panics of 1811 and 1825, and the panicky conditions in 1837 and 1839, had aroused much discussion, and public opinion was disposed to regard the vicious note circulation which had extended rapidly and widely as the cause of these repeated commercial crises. Prior to the act of 1844 the law made no distinction in the bank's liabilities, the resources being held equally as security for deposits and the redemption of cir-

**Legislation
Affecting
the Bank**

**"Peel's Act"
of 1844**

culating notes. Under this state of affairs, if the depositors demanded coin to such an extent as to exhaust the reserve there would be no coin left for the note holders, or vice versa. In the panic of 1825 the demands of depositors reduced the reserve to only a little more than a million pounds, while there was yet outstanding note issues amounting to over twenty-three million pounds. By the act of 1844 Parliament undertook to make the notes of the Bank of England secure and limit the issue of bank notes of all other banks in the realm. With a stable currency redeemable in gold, Sir Robert Peel believed that fear and distrust, the bases of panics, would be banished from English commerce, and panics would cease, and yet three years after the passage of the act (1847) the country experienced a panic, and ten years thereafter (1857) one of the greatest financial panics ever known shook the English banking and commercial world from center to circumference, to be followed in 1866 by still a third panic of intense severity.

By the act of 1844 the bank was divided into two departments, viz., the banking department and the issue department. The former was to perform the functions of ordinary banking, such as receiving deposits, discounting paper, selling or buying exchange, etc. The latter was charged with the exclusive issue and redemption of circulating notes. These two departments of the bank were to be kept as separate and distinct as though they were two independent corporations. The issue department

Division into Two Departments was required to hold either government securities or coin or bullion for all notes issued by it, and since the original provision limits the amount of the securities to £14,000,000, it follows that all notes issued above that amount must have an equivalent of coin or bullion in the vaults of the Bank. Of the £14,000,000 in securities £11,015,100 due by the British government formed a part. The act also provided that the Bank might hold silver to the extent of one-quarter of its gold, and issue notes against such holdings,

but this was never done. By another provision of the act, should any other bank, issuing notes at the time of the passage of the act, discontinue such issue, the Issue Department of the Bank of England might increase its holdings of securities to the amount of two-thirds of the issue of said retiring bank, and issue its own notes against such securities. By this means the Bank of England will eventually become the exclusive bank of issue, for one by one the joint-stock banks discontinue their issues, and cannot resume them, the privilege passing directly to the Bank of England.

The amount of securities held by the issue department against which notes may be issued by the bank has been increased from time to time by the discontinuance of note issues by other banks, until it amounted in 1900 to £17,775,000, and the amount of notes issued against gold coin or bullion on hand amounted to £27,116,000, making a total of outstanding circulating notes £44,891,000. It will thus be seen that the issue department of the bank is simply an establishment for the exchange of notes for bullion or bullion for notes. Every Bank of England note outstanding is practically a gold certificate, since the bank has gold on hand to pay

Bank of
England
Circulation

on demand every note that it has put in circulation, except the comparatively small portion of the reserve represented by the debt, and which is partially covered by the bank's surplus. These notes are a legal tender, as long as the bank is able to redeem them in gold. By thus keeping a redemption fund of gold in the bank vaults sufficient to actually redeem the notes in circulation, the element of credit is entirely taken out of the circulating medium of the United Kingdom, and the note holder knows that he can get its face value in gold at any moment. This stability of the currency, it was believed by the supporters of the Peel Act, would banish all fear from the minds of note holders and prevent the hoarding of gold. Since the hoarding of money through fear partially causes panics by making loanable capital

scarce, it was contended that when the motive to hoard was destroyed panics would cease.* But the panics of 1847, 1857 and 1866 were not prevented by the stability of the currency, and in fact the panic of 1866 was only allayed by the announcement that the Bank of England had authority from the government to issue notes in excess of the redemption fund on hand. On the worst day of the panic, May 11, 1866, called "Black Friday," the bank found its reserve in the Banking Department reduced to nearly £3,000,000 at the close of business. That evening the chancellor of the exchequer recommended that the bank act be suspended, and this was promptly done by the government. The announcement on the following morning that the Bank of England had authority to issue notes beyond the limit to whatever extent was necessary, quieted the fears of the people, and affairs returned to their normal condition.

Ordinarily the banking department has no power to borrow of the issue department. It may take notes to the issue department and exchange them for gold or vice versa, the same as outside persons, but during each of the three panics, viz., 1847, 1857 and 1866, the government suspended the bank act, and permitted the banking department to borrow notes from the issue department without depositing gold in exchange. No doubt the knowledge of the fact that this has been done in the past and will be done again in case future emergencies require it, will have a strong tendency to prevent panics in future.

This suspension of the banking act in case of panic or great emergency is the only elasticity of the English currency.† At

*Fear is not so much a cause of panics as one of its pronounced features, and the hoarding of money through fear intensifies the alarm by depleting the cash reserves in the banks, and by destroying their lending power for the time being, makes "loanable capital" (which may be actual money, and may be only bank credit) scarce.

†The suspensions of the bank act under stress of emergencies show the unsoundness of the theory or "principle" upon which it rests. Only a currency based on credit can have elasticity. Credit can both stretch and contract; money cannot, though its volume may vary both actually and relatively in any country, nor can it be made to respond automatically to the needs of the hour.

all other times there is no expansion to it whatever. Not a note can be issued without the gold is deposited in place of it, and hence the total volume of Bank of England notes in circulation in the kingdom is dependent upon the amount of gold in the vaults of the issue department of the Bank of England. Then again, the system has been criticised on account of the large amount of gold which is kept constantly locked up and idle, while it is claimed that a safe and conservative reserve could be maintained and still release several million pounds of gold now in the vaults which could be turned into circulation and productive use. The defenders of the system say that the act prevents the over-issue of notes, which would be a greater injury than the loss of the use of a portion of the gold reserve, and furthermore that the gold is the property of the holders of the bank notes, who have accepted the notes on condition that they could return them to the bank and receive gold for them at any time. The statement of this department of the bank Nov. 6, 1907, was:

ISSUE DEPARTMENT.

Notes outstanding, £45,940,400	{	Government debt	£11,015,100
		Other securities	7,434,900
		Gold Coin and Bullion.....	27,490,400

Besides the Bank of England notes there is a large amount of gold and silver in circulation in the United Kingdom, necessitated by the fact that the Bank of England does not issue notes for less than £5. The Scotch banks are allowed to issue notes for £1, and a large portion of this circulation is in small denominations.

The sources of profit of the issue department are not extensive nor numerous. The government pays $2\frac{1}{2}$ per cent. interest on its debt (£11,015,100), and interest is received on the other securities which the bank holds. In addition to this the bank makes a profit on the purchase of foreign coin and bullion

brought to it, as it buys gold at the legal price of £3.17s.9d. per ounce, and turns it into the mint at a profit of 1½d. per ounce. The bank also derives a considerable profit from the destruction of bank bills. Any bill which is not presented at the bank counter in forty years is considered lost and credited to the profit account.

CHAPTER XIX.

ENGLISH MONEY SYSTEM.

BANK OF ENGLAND; IMMENSE RESPONSIBILITY AS KEEPER OF THE RESERVE; BANK RATES; MANAGEMENT.

The banking department of the Bank of England is substantially the equivalent of an extensive banking house, with all banking functions except that of issue. It receives deposits, discounts commercial paper, loans on collateral and buys and sells exchange precisely the same as any other bank. In addition to this it acts as the banker of the government, in the management and payment of interest on the public debt, the issue and withdrawal of Exchequer bills and bonds, the issue of government loans, and all other financial operations affecting the government.

The Banking Department Like other banks it must as a matter of ordinary prudence keep on hand a cash reserve against its liabilities. It is bound to meet all its demand liabilities in cash, consisting of notes or coin, like other banks, and if it has need for a greater quantity of notes than that on hand, it may procure them from the issue department in exchange for gold the same as any other bank.

Every deposit bank must retain constantly on hand, or within easy reach, a sum of legal tender money, equal to a safe and proper proportion of its liabilities, in order to meet unexpected demands of depositors. This is a universal rule the world over, and is based upon the supposition, which experience has shown to be generally true, that all depositors will not call for their deposits at the same time, but under disturbed conditions, an unusual number may make such demands, and the bank must at all times be in readiness to meet such calls. This

reserve is the safety fund over and above the daily requirements of cash to transact the ordinary volume of business, held by the bank to meet extraordinary and infrequent demands. The banks all over England keep their reserves in London. The same reasons which induce a merchant to keep a bank account, viz., convenience, safety, etc., act as incentives to a bank to deposit its reserve in whole or in part with another bank or banker. In order to conduct exchange transactions and have facilities for rediscounting time bills, every bank and banker in the United Kingdom, not located in the metropolis, find it necessary to carry an account with some London bank or banker, and as the latter, as well as the bill brokers of Lombard Street, who are really bankers under another name, allow interest on such deposit accounts, the result is that practically all of the reserve of the country is carried in these accounts. "Owing to the fierce competition for practical profits,"* nowhere more severe than in the field of banking, the London joint-stock and private banks maintain no coin reserve of their own, but deposit with the Bank of England all cash not needed for ordinary transactions from day to day. The Bank of England does not pay interest upon these deposit accounts but the willingness of smaller banks to place their reserves in the Bank of England is due to the fact that they are relieved of the care and risk of such large sums, and by showing their funds in their balance sheets thus deposited they command public confidence. Another reason is that the London clearing house settlements are made through the Bank of England, which practically compels the members of the clearing house to keep their reserve cash with that institution. The Scotch and Irish banks keep their surplus money in London. A portion of it is loaned out or invested in securities and the remainder deposited in the Bank of England. It will thus be seen at once that the Bank of England holds not only its own reserve, but the reserve

*Conant, *Modern Banks of Issue*, p. 130.

of all London, and not only of all London but of all England, Ireland and Scotland.

This great responsibility of the Bank of England makes it the basis of the credit system of the kingdom. Upon the management of the Bank of England depends the solvency or insolvency of England, for all business is dependent upon the banks, and all banks are dependent upon the one great bank, "The Old Lady of Threadneedle Street." While the Bank of England is

Immense Responsibility of the Bank a private corporation carried on for the benefit of its stockholders, who alone share the profits and direct its management, it is in a sense a public institution, for to it is confided the safety of the commercial public and credit of the kingdom, and it is morally bound in time of stress to sustain the entire financial fabric.

There is no law requiring the bank to maintain a stated reserve in proportion to its liabilities, and since the management is expected to earn as large dividends as possible for the stockholders, the tendency would naturally be to reduce the volume of idle cash to the lowest point consistent with safety. Like other banks, the Bank of England loans out a portion of its deposits, consisting largely of reserves of other banks, and the effect of this is to cause the reserve to be much smaller in proportion to the liabilities of all the banks than it would be were each bank to hold its own reserve. But the fact that under the English system the bank reserve is reduced to a comparatively small proportion of the liabilities is not the only objection which can be, and often is, urged against it. This reserve, all important as it is, is given over to one board of directors, and upon their wisdom its control depends. If they

One Reserve commit indiscretions the entire financial and commercial system may be seriously injured. Having a smaller balance to meet liabilities, any error in the management of that balance becomes proportionately serious.

The natural method would appear to be that each bank

should keep its own reserve. Each would then be most anxious to keep a sufficient reserve, because its own life and existence would depend upon it. The reserve of the entire country would then be guarded and controlled by the total banking wisdom of many boards of directors, and the loss of interest occasioned by the amount of dead capital locked up in the banks as reserves, would be more than offset by the added security. In no other country than England could the one reserve system exist as it does there. The system was not deliberately founded there, but grew up as a consequence of many events. As the system grew, confidence in the bank also grew, until the stability of the bank is beyond question and supports the system of one reserve. It is the absolute faith of the people in the stability of the Bank of England that takes the place of a large reserve.

But the reserve in the Bank of England is subject to a still further strain occasioned by the necessities of foreign commerce. London is the center of English commerce, and in case the balance of trade* goes against England and in favor of any other country, that balance must be paid by London, and this is equivalent to saying that it must be paid by the Bank of England. When, during our civil war, the supply of cotton to England by the United States was cut off and exports to America greatly reduced, immense sums of money had to be sent to Australia and Egypt to pay for cotton to keep the looms of Manchester supplied. Of course no foreigner can take away the cash of England without giving a value therefor, but that value may be in produce or manufactures, represented by bills of exchange which the foreigner discounts in Lombard Street, and then he may

London the
Clearing House
of the World

*The phrase "Balance of Trade" is usually taken to mean the differences between imports and exports of merchandise, but strictly the balance is caused quite as often through movements of capital in the form of loans or investments, as of merchandise. These movements not being "visible" through the records of the custom houses, are often very difficult to follow.

take away a part or all of the proceeds of his bills in bullion. No other city in the world cashes as many foreign drafts as London. No other city in the world receives as many remittances or pays as many drafts as London. No other city holds as much foreign money on deposit as London, for wherever the people have payments to make, at that place they must keep money on deposit. Formerly Paris was a European clearing house to a considerable extent, and divided the business and responsibility with London, but the changes in government in France have had the effect of greatly reducing the confidence of foreigners in the stability of the Bank of France, while the volume of mercantile business finding its natural settlement in London compelled banks all over the world to keep accounts there. As it is more convenient to keep one foreign account than several, and most convenient to keep this in the city with which transactions are largest and most numerous, there was thus placed upon merchants all over the world the effective pressure of more favorable exchange rates when bills could be drawn upon and payments made in London. Very large banks can keep accounts in all the European centers, but it would neither be profitable nor possible for small banks to keep such accounts, because of the amount of cash that would be locked up. Moreover the most favorable terms can be obtained upon large accounts only, and it is a custom, the world over, except in the United States, for banks to exact commissions on all services rendered. These considerations have tended to centralize the financial transactions in the Bank of England,* which has established a record for stability and uniformity of dealing through long generations.

As the commerce of a nation increases the reserve on hand

*When the volume of exchanges on some other city, New York, for example, becomes so great relatively, that banks the world over find it cheaper to effect settlements there rather than in London, the prestige of London must surely begin to wane. There are other factors in the case, however, such as the amount of free capital available for discounting time bills of exchange, etc., but the foregoing is the chief one.

to settle the balance of that commerce must likewise increase. A single bad harvest in any important country with which England trades, may seriously affect the balance of trade with England, by reducing the demand for English manufactures. A sudden increase of imports or a cessation of exports causes a balance of trade to become due, which must be paid in bullion. Within a country, paper currency may be used in settlement of obligations, but in international trade the only cash is metal. The Bank of England must therefore keep a reserve which can be used for foreign payments either in bullion or legal tender notes which can be converted into bullion on demand by passing them over the counter of the issue department. The requirements of foreign commerce are often sudden and fluctuating, and must be met promptly. Therefore it is of the greatest importance that the reserve upon which this commerce depends should be both ample and ready, at all times, to satisfy the demands upon it.

Foreseeing the need for an increase in the reserve in anticipation of large foreign payments, soon to be made, the question at once arises, "How are the bank directors to secure the additional bullion?" They may reduce the volume of discounts, and this would in a measure help to accomplish the purpose, but would not afford a sufficient increase in the reserve to meet a large or continuous drain on the reserve. They may sell securities, but in a very large number of instances this would merely mean the transfer of a credit from one account to another on the bank's ledger, as the buyer of the securities would in all probability be an individual or bank having a deposit account with the Bank of England. What then is the means employed to increase the reserve? The answer is, raising the rate of discount. If the directors of the Bank of England vote to raise the rate of discount, it is proved by experience that money flows to Lombard Street and from the other banks it flows to the Bank of England. Money (i. e. capi-

**A Reserve for
Foreign
Payments**

**Rate of
Discount**

tal) goes where it is wanted most and commands the highest rate of interest.

An increase in the bank rate has an immediate effect on foreign exchange transactions, making it unprofitable, or tending to make it unprofitable, to withdraw gold for export, and at the same time tending to make it profitable to ship gold from other financial centers to London. The bankers there pay a higher rate of interest and charge borrowers a higher rate of discount. The effect of the operation of raising the rate of discount even slightly is to swell the reserve in the vaults of the Bank of England, and at the same time to diminish loans by discouraging borrowers. With money a little "tighter," imports are diminished and exports are increased, thus tending to change the balance of trade in England's favor and reduce the necessity for large foreign payments. The raising and lowering of the rate of discount by the directors of the Bank of England, then, acts as a lever of control to the financial and commercial systems of England. When the bank is "flooded" with money, and no prospects are visible of a drain upon the reserve, the rate of discount is lowered. Money now flows from Lombard Street into other channels both in England and on the Continent, where it can be more profitably employed; with a lower rate of discount, borrowers are more plentiful, and more goods are imported.

Many persons believe that the Bank of England has some peculiar power which enables it arbitrarily to fix the rate of interest, whereas the truth is the bank merely gives expression to the market value of money, as fixed by the laws of supply and demand. The value of money is settled, like that of all other commodities, by the inexorable law of demand and supply, and the bank merely takes the lead in fixing or establishing that value in the form of a discount rate. If the bank vaults are full, the bank lowers the rate to attract borrowers, the same as a merchant lowers the price of his goods in order to effect sales and reduce his stock,

Effect of
Supply and
Demand

and the contrary policy is pursued to increase the cash in the bank vaults.

The government of the Bank of England is confided in a board of twenty-four directors, a governor and a deputy governor, who each serve one year. In theory a portion of the directors go out annually, remain out for a year and are then subject to re-election, but as a matter of fact they are nearly always re-elected at the end of the year, unless other members of the board oppose. All the directors in turn serve as deputy governor and governor, in rotation, and it is not until a director

**Management
of the Bank
of England**

has been upon the board perhaps twenty years that he succeeds to the position of governor.

When a vacancy occurs in the board by death or resignation, the directors usually select some promising young business man for the place. In order to reach the governorship within the period of a lifetime, it is necessary that new directors should be young men. The position of director of the Bank of England is considered a highly desirable one, as it gives a considerable status to both the individual and the house to which he belongs. By a long-established usage the directors cannot be connected with any other bank, in any official capacity. They must be merchants, brokers or capitalists of experience, and men presumed to possess information as to the present and future course of trade. The reason for the discrimination against bankers as members of the directory of the Bank of England no doubt arose out of the narrow-minded jealousy of former times, which regarded all other banks as rivals to be feared and opposed.

In theory the system of management of the Bank of England would seem to be very objectionable. A governor, the chief executive officer of the bank, allowed to hold the office but one year, a directory made up of merchants, a portion of them young men, and not a trained banker in the entire board,* would not or-

*There is no better school for the education of bankers in the larger lines of their profession, in a firm grip on guiding principles and a wide outlook over the whole commercial and financial world, than service on the board

dinarily be regarded as a very competent or safe board. Indeed, were such a system of management proposed at the present time for the conduct of a new and important banking house in England or elsewhere, it would instantly be rejected as crude if not absurd. And yet the Bank of England, which holds the nation's reserve, is managed in this way. Banking is now regarded as a profession to which men should be trained by years of constant experience and familiarity with financial questions. And yet the Bank of England has been singularly well managed. Its directors have always seemed to appreciate the large responsibility resting upon them, as managers of the bank which sustains the credit system of England, and while at times they have erred in policy the great institution stands to-day as solid, in the estimation and confidence of the people, as the government itself.

of the Bank of England. As nearly all of the board have been many years in office, they are as a lot, men of ripe experience, and as the new men are always in the minority and are constantly being educated by their environment and responsibilities, a tremendous force is thus developed in the line of conservative action. Technically they may not be bankers; practically they are very good ones.

CHAPTER XX.

GERMAN BANKING.

REICHSBANK; ELASTICITY OF GERMAN CURRENCY; STABILITY; RUSSIAN BANKING.

Prior to the unification of the German Empire in 1871 each state had its own banking system, and most of the banks were allowed to issue notes according to certain restrictions and upon such bases as the states and cities establishing them should prescribe. These banks differed materially as to the limit of their authorized issues, and were bound to a great variety of restrictions as to their requirements of a reserve. Under this state of affairs notes were current only in the German Banking before the Empire state where they were issued, and trade was seriously hampered for want of a stable and uniform currency. The coinage law of 1871 undertook to establish a uniform monetary system throughout the empire, and paved the way for the adoption of the gold standard in 1873. In 1874 a law was passed abolishing the different issues of paper money then current throughout the different states of the empire and substituting therefor imperial bank notes convertible into gold. The new currency was distributed to the states to the extent of 180,000,000 marks. Finally, in 1875, all banks of issue throughout the empire were brought under a uniform law, and made a part of the system of imperial finance, thereby greatly improving and facilitating trade and commerce.

Under this system the Bank of Prussia became the Imperial Bank of the empire, with a near approach to a monopoly of the note issuing power and the same system for the gradual abolition of the issues of other banks and the final concentration of the power of issuing circulating notes in the Imperial Bank as is

possessed by the Bank of England. The capital of the Imperial Bank (Reichsbank) is 120,000,000 marks, divided into shares of 3,000 marks each, and is all owned by private individuals. Unlike the Bank of England, the Reichsbank is subject to governmental control. Its affairs are managed by a president and board of directors named by the government, subject to the chancellor of the empire, or a substitute named by him who has entire charge of the bank, and directs its policy. The stockholders of the bank have no voice whatever in its management. They merely furnish the capital and divide the profits of the institution. As a matter of fact, however, the stockholders do not receive all of the profits. In case the net profits exceed $3\frac{1}{2}$ per cent., then the government becomes a sharer in the profits above that limit.

The German system of note issues rests upon a mixed basis of securities and specie, somewhat similar to that of England, with the important difference that the law contents itself with requiring the maintenance of this basis, without specially pledging or setting apart specific coin or securities for the purpose, as is done by the Issue Department of the Bank of England. German currency is secured by the salutary power of the law rather than by specific property, and to make sure of the observance of the law, all banks of issue are required to report the condition of their note issues every week to the chancellor of the empire. No precise limit is fixed for the aggregate circulation of the notes of the Reichsbank and other banks of issue, but the total of notes which can be issued without being covered by cash in the vaults of the banks is 385,000,000 marks, of which 250,000,000 marks are allowed to the Reichsbank and 135,000,000 marks are apportioned among the other banks. For all notes issued by any bank beyond its limit, the government requires that cash shall be held to the full amount of such issue, the term "cash" here meaning German and foreign gold, bullion, imperial treasury

Security for
Loans

notes and the notes of other banks. But if any bank issues notes beyond the limit and not covered by cash a government tax of 5 per cent. is imposed, thus taking away the profit, and hence the inducement to such extra issue. In case the weekly report of any bank shows that its issue exceeds the limit as above explained, a tax of $5/48$ per cent. is charged, this being the rate for one week at 5 per cent. per annum. The law requires in any case, however, that the cash held, exclusive of the notes of other banks, must equal not less than one-third of the total note circulation, and that the remainder shall be protected by good assets, usually consisting of securities or discounted paper having not more than three months to run and bearing two solvent names. The note issues of Germany thus rest upon a mixed basis of specie and other assets.

As previously stated, the legal limit of note issue without specie reserve may be exceeded upon payment of the government tax of 5 per cent.. This is an important feature of the German system, since it gives an elasticity to the currency of the empire.

**Elasticity of
the Currency**

In a time of stringency, the rate of discount goes above 5 per cent., and then the banks can make an issue beyond the limit, loan the funds at the ruling rate of discount and have a profit left after paying the government tax of 5 per cent. But the moment the money market loosens and the rate of discount falls below 5 per cent. the banks can no longer afford to loan out funds at a rate which is lower than the tax which they must pay to the government, and hence the extra circulation is retired. By this system the volume of the circulating medium adjusts itself to the needs of the country. This automatic contraction and expansion has been of great benefit to the commercial interests of Germany. In this way financial stringencies have several times been relieved and probable panics averted.

The currency of Germany is kept on a gold basis by the Imperial Bank, which is required to redeem its notes on demand.

While the notes are not issued against a specific reserve, as in the case of the Bank of England, but against the general assets of the bank, and are not even a prior lien on those assets, nevertheless a sufficient supply of gold is carried in the vaults of all the issuing banks to place the redemption of the notes beyond doubt in the minds of the people. In 1899 the

Gold Basis total volume of circulating notes outstanding in Germany amounted to 1,322,208,000 marks, and the total metallic reserve held by the eight banks issuing these notes was 911,528,000 or a little less than seventy per cent.

Bank notes in Germany are not issued in lower denominations than 100 marks, and this restriction keeps in constant circulation a considerable quantity of specie for small transactions. The bank notes are not a legal tender, but their credit is maintained by their convertibility at all banks of issue. By means of an extensive system of branches of the Reichsbank scattered throughout the empire, the system of deposit banking is becoming quite popular, thus reducing to a certain extent the use of bank notes in the transaction of business. A large number of joint stock banks located in Berlin and other prominent cities of the empire have been organized, and materially assisted in furnishing banking facilities to the people and educating the masses in the utility of deposit banking. These joint stock banks, as a rule, carry their reserves in the Reichsbank, that

**Keeper of
Reserves**

institution being the safest and most convenient storehouse of gold in the empire. Thus it will be seen that these banks sustain very much the same relation to the Reichsbank that the joint stock banks of London do to the Bank of England. The policy of the management of the Reichsbank has been to guard well these reserves by a large supply of gold in the vaults, so as to protect the credit system of the empire by establishing perfect confidence. Like the Bank of England, the Reichsbank resorts to the scheme of raising or lowering its rate of discount to protect its reserve, raising

its rate in times of danger and lowering it in times of peace and plenty.

In order that the action of the Reichsbank may virtually control the money market, the law forbids all other banks of issue to discount at a rate lower than that of the Reichsbank when its rate is as high as four per cent. Thus when the Reichsbank raises its rate to or above four per cent. all of the banks of issue are compelled by law to do the same. When the Reichsbank lowers its rate below four per cent. the other banks are allowed to discount at a rate of one-fourth of one per cent. lower than the Reichsbank rate. Were it not compulsory on other banks to follow the rate announced by the Reichsbank, business would merely shift from one bank to another and the general situation would in no way be affected or improved. The Reichsbank has about three hundred branches scattered throughout the empire and with the influence of these in addition to the banks of issue the rate of discount as established in Berlin by the Reichsbank is easily maintained and made to control the price of money throughout the empire.

In addition to the specie and bank notes in circulation in Germany the government has notes of its own in circulation. An imperial "war chest" is kept in which is stored a large reserve of gold as an emergency fund to be used in time of war. This fund is estimated at 150,000,000 marks, and in order to prevent so large an amount of cash from lying idle, an issue of imperial treasury notes for an equal amount is put into circulation. These notes are really gold certificates, since they merely circulate instead of the coin.

Controls other
Banks

Imperial
Treasury
Notes

RUSSIAN BANKING.

The Imperial Bank of Russia was established in 1860 with a capital of 25,000,000 roubles. It is wholly a government institution, controlled by the Czar, and has no connection what-

ever with private individuals, except to the extent of its daily business transactions. It thus partakes of the imperialistic character of the government in a decided degree. As has been expressed by one economic writer, it "is as if we had a bureau in the Treasury Department with power to do a great and varied banking business and with branches all over the country." Unlike the Bank of England, the Bank of France, or the Reichsbank of Germany, which are formed by means of private capital, the Imperial Bank of Russia is merely the Russian Government engaged in the banking business with its own capital and for its exclusive profit. In 1896 the capital of the bank was increased to 50,000,000 roubles. It issues the paper money of the empire exclusively. The issue and the commercial banking departments are kept entirely separate, upon practically the same plan as that followed by the Bank of England.

Paper money is the actual medium of exchange in Russia. Notes are issued in denominations of 100, 25, 5, 3 and 1 roubles and are full legal tender. Specie payments have been suspended since 1855. The paper rouble is worth 66½ copecks, there being 100 copecks in a rouble. The authorized circulation of paper currency based upon the credit of the government is 769,342,911 roubles. This is fiat money.

Above this the note issues, if any, must be covered by the deposit of an equal amount of coin. The total circulation, both covered and uncovered, is about 1,100,000,000 roubles, and the metallic cash in the bank vaults is in the neighborhood of 700,000,000 roubles, of which less than twenty millions are in silver.

Although the bank holds what is called a redemption fund, there is no provision made for the redemption of the notes. The stock of gold which is held is merely for the purpose of establishing confidence in the minds of the people, preventing fluctuations or depreciation of the paper currency and holding the

value of the paper at a fixed rate in proportion to gold. Under this policy the rouble has been practically stationary in value during the past ten years, and its value has been fixed by exchange at 66½ copecks, or, one gold rouble as equivalent to one and one-half paper roubles. The paper currency is thus given a fixed value and the two roubles—paper and gold, circulate side by side at the agreed value of three to two. The government has accumulated its gold reserve by retaining most of the gold product of the Russian mines in recent years.

The commercial banking department of the Imperial Bank of Russia exercises all of the ordinary functions of a bank of deposit. By means of its one hundred branches scattered throughout the empire, the Imperial Bank has been able to reach the people and supply needed banking facilities in a fairly satisfactory measure. The policy of the present Czar is to develop the almost limitless resources of the country, and to this end the government, through its bank, is very liberal in making loans, frequently taking risks which would not be regarded as safe according to the usual rules of credit. The government no doubt is willing to take some risks for the sake of the general betterment of the country, and it can afford to make unusual loans since it has extraordinary power to punish delinquent debtors.

Loans for development purposes are regarded with especial favor by the loan department of the bank, since new industries in all parts of Russia are much desired by the Czar. Agricultural loans are a prominent feature of Russian banking. These consist of loans made to small farmers upon a pledge of their products, or the guarantee of individuals who may be regarded by the bank as trustworthy. Loans are also made to mechanics and manufacturers upon pledges of their products. In both this and the agricultural class of loans the property pledged remains in the possession of

the producers, and the loans are made for long terms—until the products can be marketed. This system results in some losses to the government, but the general benefit to the country by stimulating industry is believed by Russian statesmen to more than compensate for the percentage of losses.

It will be seen from the foregoing description that the Russian banking system is not a complicated one, since no private capital or individual management is involved. Its volume of circulating medium is dependent upon the will of the government, and is limited only by the amount which will circulate without serious depreciation. As previously stated the paper currency is worth but 66 $\frac{2}{3}$ per cent. of gold, but the government aims to hold it at this point. This can only be done by strengthening the gold reserve, and the financial policy of the government is to do this. In case of hard times the government increases the volume of money sufficient to slightly raise prices and stimulate production. This is the elasticity of the Russian system of currency.

CHAPTER XXI.

SCOTCH AND CANADIAN BANKING.

SCOTCH SYSTEM; BRANCH BANKS; CANADIAN SYSTEM; ASSET BANKING; ELASTICITY.

Banking in Scotland is conducted upon a system resembling in many respects the English, and yet differing from it in several important particulars. There are ten banks of issue, each of which has many of the privileges of the Bank of England, but without the monopoly which the latter possesses in England and Wales. These ten banks are strictly private institutions, but are allowed to issue notes after the method of the Bank of England. The act of 1845 regulating the banking system of Scotland, fixed the volume of authorized note issues of all the banks at £3,087,209, which, however, has since been reduced by the suspension of two banks to £2,676,350. All note issues above this amount must be fully covered by coin, one-fifth of which may be silver. The circulation on June 30, 1900, amounted to £7,903,000, and in addition to this, Bank of England notes circulate extensively in Scotland. A large portion of the circulating bank notes of Scotland are in denominations of less than £5, while the Bank of England notes are all of £5 or upwards.

May and November in Scotland are the seasons for making the regular semi-annual settlements. Interest on mortgages is then collected, and annuities are received. The country folk draw the interest on their bank deposits, and there is a general liquidation throughout the country requiring an additional volume of currency. The banks are then pressed to enlarge their circulation, and in order to do this they must in some cases bring specie from the Bank of England, the great storehouse of cash for the United

Kingdom. After the drain is over the circulation falls to its normal volume and the boxes of gold are returned to London, without, in many instances, having been opened. The elasticity of the currency would be much greater were it not limited by the requirement of the coin deposit, but safety in Scotland, as in England, is preferred to elasticity, and the quality of safety is so great that the people prefer bank notes to gold.

A novel feature of the Scotch system is the cash credit accounts, by which a customer whose account is secured by the guarantee of two friends, is supplied with funds from time to time as he needs it to the agreed limit. The system practically amounts to the granting of permission to firms or individuals to overdraw their bank accounts to a certain extent. The design is to furnish a working capital to tradesmen and farmers, especially those who are possessed of good character but with little means. The customer is only charged interest from day to day on the amount which he actually draws under his cash credit and his deposits go to reduce the amount of such interest. The difference between this arrangement and the usual way of covering the loan with a note is that the daily deposits of the customer reduce the interest charge and the bank has control of all sums not in active use.

Scotland has eleven banks and these have 1,077 branches. Nowhere else is the system of branch banking so extensively carried on, a feature scarcely known in the United States. Scotland has one bank or branch bank to every 4,000 of population against one to about every 10,000 in England, and one national bank to nearly every 20,000 people in the United States. With a population of only a little over 4,000,000 Scotland has bank deposits of £103,674,000, or nearly £26 per capita. This speaks well for the thrift of the people and may be attributed in a large part to the diffusion of branch banks into every corner of the public domain. In the early history of banking in Scotland a low

Cash Credit
Accounts

Branch Banks

rate of interest was paid by the banks on current deposit accounts. This no doubt stimulated habits of saving and thrift among the people and taught them to use the banks as depositories for their funds. Gradually the interest was reduced and finally abolished on all but savings accounts, with little or no diminution of the number and size of the depositors' accounts. Governed by a head bank, the expense of conducting the branches is comparatively small, amounting on an average to not more than $1\frac{1}{2}$ per cent. on the deposits, and thus with the economy of resources afforded by the system, the eleven institutions produce earnings which enable them to pay dividends of 8 to 15 per cent. per annum.

THE CANADIAN SYSTEM.

Prior to the consolidation of the various provinces into the Dominion of Canada, in 1867, a number of the largest banks issued circulating notes under permission of their respective provincial governments, but after the consolidation, only banks authorized by the general government were permitted to issue notes. The present banking system of Canada somewhat resembles that of Scotland, and possesses some excellent features, among which is its system of "asset currency" with its very desirable quality of perfect elasticity. In 1870 a law was passed requiring all banks of issue in the dominion to have a paid up capital of at least \$250,000, and restricting the note issue of each bank to the amount of its paid up capital. In 1891 the banking act was amended and the capital stock limit of issuing banks was raised to \$500,000, of which one-half must be paid over at the time of organizing the bank, to the minister of finance, to be held by him until the organization is complete and all details of the law have been complied with. He then pays back to the bank the amount so deposited, less five per cent. of the capital, which is retained as a guaranty fund, to be used in the redemption of notes in case of the failure of the bank.

A Canadian bank may issue notes to the full amount of its capital stock, and no reserve is required to be kept on hand as a security for their redemption, the only provision of this kind being the fund in the hands of the treasurer, composed of the five per cent. required to be deposited by each bank of issue at its formation. Thus the notes of every bank are credit obligations based upon almost wholly the general assets of the bank, but the law makes them a first lien upon such assets, liabilities to the dominion government being a second lien, and liabilities to the provincial government a third lien. In addition to this very excellent precaution, the law imposes a double liability upon the stockholder, making each liable for double the amount of stock which he holds.*

No inspectors or examiners are employed by the government, but monthly reports are made to the government showing the condition of the bank's assets, circulation, etc., and severe penalties—fine and imprisonment—are prescribed for failure to comply with the law or the making of false returns.

The banks may also demand of each other statements as to their condition at any time, and thus the most careful scrutiny is exercised by each bank upon all of the others as well as by the government. Since each bank in the regular course of business has occasion to take over its counter the notes of other banks, the care exercised against taking notes that are not good is a wholesome restraint upon every bank, and under the system every banker is watching the solvency of every other. This supervision is far more thorough and effective than that of government inspection, since bankers are not only more capable of scrutinizing such institutions, but it is vital to their interest to do this in the most thorough manner.

*Two banks, La Bank du Peuple and the Bank of British North America, exist under ancient charters which do not permit of the double liability requirement as to stockholder, and for this reason they are only allowed to issue notes to the amount of 75 per cent. of their capital.

An essential feature of the Canadian system is the fact that the bank notes are not a legal tender, for were they possessed of this quality, other banks would be compelled to accept them, irrespective of the solvency of the issuing bank. They would circulate then not upon their merits but upon the legal tender quality underlying them. Without the legal tender quality to float the circulating notes, each bank takes them upon the soundness of the bank issuing them, and upon the slightest indication of weakness on the part of the issuing bank its notes are thrown out and it is discredited. Thus any bank may be summarily and severely punished the moment it allows itself to get into an unsound or weak condition.

**Not Legal
Tender**

The banks of the three financial centers of the dominion, viz., Montreal, Quebec and Toronto, act as clearing houses for all the banks of the dominion. Notes of any discredited bank are immediately sent to them for redemption, and should a bank suspend, liquidators are at once appointed to convert the assets and redeem the circulating notes. In case the assets are insufficient for this purpose the extra liability of the stockholders is resorted to, and should this not prove sufficient, then the five per cent. fund in the hands of the treasurer is forthcoming for the purpose. Should this fund become exhausted, the solvent banks are assessed to make up the difference. As a matter of fact, however, the liquidators are always able to redeem the notes out of the assets, but in order that all solvent banks may accept the notes of an insolvent bank without loss, the law provides that such notes shall bear interest at the rate of six per cent. from the date of the suspension of the bank until they are redeemed. Thus the notes of even a suspended bank never fall below par. After the lapse of sixty days, if the liquidators do not pay, then the treasurer pays them out of the redemption fund.

Liquidation

The banks are compelled to keep their notes at par, and in

order to do this they must provide redemption agents at various points throughout the dominion. Were it not for this provision, notes of a Montreal bank would be at a discount when circulating in a distant province like Manitoba, for the reason that time and effort would be required to present the note at the proper place for redemption.

The elasticity of the circulating medium is one of the features most prized in the Canadian banking system. This quality of being capable of expansion and contraction according to the requirements of trade is possessed by the note circulation of Canada to a greater extent than that of any other in the world. When business activity demands a large circulating medium the banks issue their notes to meet the demand, not exceeding, of course, the amount of their paid up capital, and when less money is needed these notes drift back into the banks in the form of deposits or in liquidation of discounts and are thus practically retired, being locked up in the vaults. They are not then idle capital since they have cost nothing, except the expense of printing them. The volume of the circulating medium of Canada often varies as much as 15 per cent. in the course of the year. As a matter of fact the volume of notes outstanding is usually not much above 75 per cent. of the paid up capital of the banks, thus the currency has an expansibility in case of emergency amounting to nearly one-fourth its usual volume, provided, of course, the assets of the bank are sound in quality. As a result of this, rates of interest in Canada are comparatively uniform, and a "tight" money market is unknown.*

With the currency based upon the general assets of the bank having a priority of lien over all other liabilities, being

*True elasticity in bank note circulation implies automatic adjustment of the volume to the needs of business. Heretofore the Canadian system has worked perfectly because the banks have been able at all times to supply all that has been needed without exceeding the maximum limit, and that limit was so well beyond the need of the country that the banks

under the surveillance of not only the government but, better still, the entire banking fraternity, and safeguarded by the double liability of stockholders, it is believed that the note circulation of Canada is absolutely safe, and possesses advantages over any other system.

The system of branch banks which prevails in Canada is not only an advantage to the banks, but a decided convenience to the people. Nearly every bank of any considerable size in the dominion has a number of branches scattered throughout the provinces, there being in all about 650 branches. Weekly reports are made to the head bank, and thus the manager is kept fully posted as to the business transacted by the branches. By this system sparsely settled portions of the dominion are provided with banking facilities through a branch

Branch Banks bank, where the business in that particular section would not be sufficient to support an independent bank. The branch may be conducted in a small and inexpensive manner suited to the needs of the community, while it furnishes the benefits of the financial strength and solidity of the parent institution. Then again, through its various branches a bank is able to loan out its funds advantageously where money is most needed. In one province there may be an abundance of money seeking investment, with large deposits in the banks, while in another where the work of development of natural resources is going on, there may be a demand for money, and small deposits in the banks. Now by transferring the surplus funds from the one province to the other both are accommodated, and this can be done easily and readily through the agency of the branch bank system. Not only is the public accommodated, but by this means the banks are able to earn

have seldom been able to push their notes out so as to raise the total beyond 75 per cent. of the maximum. Of late, however, the rapid development of the country without proportionate increase in its banking capital has changed this and their issues now approximate very nearly to the lawful maximum at all seasons.

larger dividends, in consequence of using their assets to the best advantage. Under this system the farmer in the Northwest is able to borrow money almost as cheaply as a resident of Quebec.

Mr. B. E. Walker, President of the Canadian Bankers' Association, in explaining the advantages of the branch system, said: "In Canada, with its banks with forty and fifty branches, we see the deposits of the saving communities applied directly to the country's new enterprises in a manner nearly perfect. The Bank of Montreal borrows money from depositors at Halifax and many points in the maritime provinces where savings largely exceed the new enterprises, and it lends money in Vancouver or in the Northwest, where the new enterprises far exceed the people's earnings." As water "seeks its level" so money will to a certain extent flow where the greatest demand for it exists and the highest rates of interest are paid, but by means of the system of branch banks this ebbing and flowing of the financial tide is greatly facilitated.

A third advantage growing out of this mobility of the financial system is that a financial stringency in any part of the Dominion can be instantly relieved by transferring funds from any other part, thus averting what might, under other circumstances, become a panic or commercial crisis.

In the United States under our law there can be no branch banks in our national banking system because every national bank must have a capital of at least \$25,000, and when a stringency arises in any part of the country, the banks both there and elsewhere usually look out for their own welfare, and money does not flow to the point where it is needed, as under the branch bank system.

While the law does not specifically require the banks to carry a reserve, in order to protect their notes, nearly all of the Canadian banks maintain a reserve as a means of demonstrating their strength and as a practical necessity in the conduct of their business.

The Canadian government issues a paper currency called "Dominion Notes" which is a legal tender and redeemable in gold on demand. These notes are issued in denominations of 25c, \$1, \$2, \$4, \$50, \$100, \$500 and \$1,000, and together with a small proportion of silver, furnish the circulating medium for small transactions, the bank notes not being issued in denominations below \$5, and above that amount only in multiples of five. In making payments every bank is compelled, if required, to pay small Dominion notes to an amount not exceeding \$100. Thus the notes readily circulate, keeping the bank note circulating at par with it, and the whole upon a gold basis. There is no limit upon the issue of notes by the government, but for all over \$20,000,000 an equal amount of gold must be held by the minister of finance. Below that amount the government reserve consists of gold and Dominion bonds.

**Dominion
Notes**

CHAPTER XXII.

BANKING IN THE UNITED STATES.

COLONIAL PERIOD; BANK OF NORTH AMERICA; HAMILTON'S VIEWS; FIRST UNITED STATES BANK; STATE BANKS.

Prior to the achievement of their independence the banking facilities of the colonies were not only very limited, but crude and unsettled. No well defined system of finance or banking had been worked out, even in the older countries of Europe. The Bank of England came the nearest to a settled plan, but it was in the experimental stage, constantly changing its policy or methods during the first hundred years of its existence. Men did not understand finance. They were groping about, experimenting, trying all manner of schemes and hoping to find the successful one. The first banking experiment in this country of which we have any reliable account was started in Boston in 1714, and was to be a land bank, patterned no doubt on ideas borrowed from John Law of France. This scheme was entitled "A Projection for Erecting a Bank of Credit in Boston, New England, Founded on Land Security." The capital was fixed at £300,000, and each subscriber to the stock was required to "settle and make over real estate to the value of his respective subscription to the trustees of the partnership or bank, to remain as a fund or security for such bills as shall be emitted therefrom." At meetings of the stockholders, each person should not have more than five votes, irrespective of the number of shares which he held. Loans were to be made on "ratable estates" to the amount of two-thirds their value; on wooden houses, not exceeding the value of the land included with the house; on brick houses, to the extent of one and a half times the value of the land belonging to them; "on

**Colonial
Banking**

iron or other imperishable commodities as a pledge, for a half or two-thirds, according to the market." The scheme was very popular, especially with the irresponsible class and those possessed of real estate but no ready cash, who wanted to borrow money on easy terms. The project was vigorously attacked in a pamphlet by Paul Dudley, attorney general, who showed that the pretended land security for the bills was in reality no security at all, since the holder of them could do nothing with a mortgage if it were turned over to him. He gave it as his legal opinion that the mortgages were without consideration and would not be enforced by the courts. When a charter was applied for, the scheme was vetoed by the Colonial Legislature. Next came the Land Bank of 1741, a "pernicious grand bubble," a scheme which convulsed society in its day and came near producing a revolution. This bank began to issue circulating notes without a charter. The governor issued a proclamation against it and a general quarrel ensued. New banks now began to be organized, in imitation of this one, in all towns of importance and a regular banking mania broke out. The financial schemes were projected by "a vast multitude of necessitous, idle and extravagant persons, (who) contrived to obtain what they call money, at an easy rate and to pay their debts in a precarious, fallacious kind of bills, very illy or not at all secured, of no determined value, bearing no interest," and payable at some indefinite time. The situation resembled somewhat that which had existed in England during the South Sea speculative mania, and to bring the colonists to their senses and put a stop to these wild schemes, Parliament extended the prohibitions and penalties of the Anti-Bubble Act to the colonies. This stirred up much antagonism and resentment in the minds of the people, but resulted in killing the Land Bank. The liquidation of the bank's affairs extended over a period of almost a quarter of a century, and nearly every one who had any connection with the institution was ruined.

During the Revolutionary War, one of the most difficult and embarrassing problems which confronted the Continental Congress was the money question. How to provide the means for keeping the armies in the field was a knotty question. The treasury was bankrupt, and Congress possessed no power to compel the several states comprising the confederacy to pay their just portion of the taxes. Congress undertook to tide over the emergency by issuing bills of credit,* which were to pass as currency, but as millions upon millions of these were printed, and as the prospects of a successful termination of the war became doubtful, these bills sank in value until in 1778 a dollar

During the Revolutionary War was worth but sixteen cents in gold. In 1780 it had fallen to two cents, and in 1782 it required \$1,000 in notes to equal \$1 in gold. Different

states issued paper money at the same time which circulated at various values. The people were poor, in debt, and discontented, and general grumbling prevailed. In order to remedy this state of affairs and bring some degree of financial order out of the general confusion, Robert Morris, then superintendent of finance, in 1782 obtained a charter from the Continental Congress for the Bank of North America, at Philadelphia. The continental money was then almost worthless, having caused, as Mr. Morris said, "Infinite private mischief, numberless frauds, and the greatest distress," and he rightly believed that a large bank, properly conducted, and under control of the government would be of great service to both the government and the people. The capital of the bank was \$400,000, and its affairs were conducted by a board of twelve directors, under the inspection of the superintendent of finance, who was to receive daily reports of the business of the bank. By the fortunate arrival of \$470,000 in specie from France about this time, which was deposited in the bank, thereby greatly strengthening its standing and

*Bills of credit were issues of pure fiat money, based upon no assets and having only the faith of the people in the issuing government to support them.

credit, the bank was enabled to make large loans to the government for the purchase of army supplies. Mr. Morris afterwards said, "Without the establishment of a national bank, the business of the department of finance could not have been performed," and the war could not have been successfully prosecuted.

As some doubt existed as to the validity of a charter from Congress, the bank applied to and received one from the state of Pennsylvania. After the close of the war the bank did a prosperous business, earning dividends as high as 14 per cent. These tempting gains prompted the starting of another bank, but the Bank of North America prevented competition by absorbing the new institution, thereby increasing its capital stock to \$830,000. Some dissatisfaction arose among the "debtor class" of the bank's customers on account of the bank's practice of requiring its paper to be promptly met at maturity, and the legislature was petitioned to annul its charter, urging "usury, extortion, favoritism, harshness to debtors and the possession of undue political and commercial influence." Strange as it may seem, the petition was granted and the charter annulled in 1785. The bank continued to do business under its governmental authority, and in 1787 the legislature of Pennsylvania repented of its former ill considered action and renewed the charter. When Alexander Hamilton took charge of the government finances in 1790 he was opposed to continuing the Bank of North America as a government agent, claiming that its state charter virtually annulled its national one, and made the bank a state institution. Washington and Congress seemed to accept this view, and abandoned all government connection with the bank. It continued to do business as a state bank until the organization of our national banking system, when it entered the list as a national bank. By a special dispensation, in view of its illustrious origin, it was permitted to qualify under the national banking law, without changing its name, and so continues to the present time a vener-

**Its Charter
Repealed**

able and useful institution, the oldest bank in the United States.

Between 1782 and 1790, the Bank of North America had been the depository of the government funds, had collected and disbursed the revenues, and performed most of the functions which are now performed by the government treasury, but in his report of December 13, 1790, Hamilton strongly recommended the organization of a United States Bank large enough and strong enough to furnish a uniform and stable currency as well as to properly perform the duties of financial agent. In this he took the ground that the government should not issue paper money directly, but that a great bank, strong enough for the purpose, should make such issue subject to governmental restrictions. Hamilton understood the functions of a bank and saw how it served as a manufactory of credit. He said:

Hamilton's
Report, 1790

"Every loan which a bank makes is, in its first shape a credit given to the borrower on its books, the amount of which it stands ready to pay, either in its own notes, or gold or silver at his option. But, in a great number of cases, no actual payment is made in either. The borrower, frequently, by check or order, transfers his credit to some other person, to whom he has a payment to make, who in his turn is as often content with a similar credit because he is satisfied that he can, whenever he pleases, either convert it into cash or pass it to some other hand, as an equivalent for it, and in this manner the credit keeps circulating, performing in every stage the office of money, till it is extinguished by a discount with some person who has a payment to make to the bank, to an equal or greater amount. Thus large sums are lent and paid, frequently through a variety of hands, without the intervention of a single piece of coin."

A bill was introduced, in accordance with Hamilton's suggestions, for the creation of the first United States Bank, to be located in the city of Philadelphia. This bill met with strenuous opposition from the "strict constructionists." Madison

was the leader of the opposition in the House, his main objection to the measure being "That the power of establishing an incorporated bank was not among the powers vested in Congress by the constitution." But in answer to this, Hamilton expounded the doctrine of implied powers, claiming that the power to create a bank was clearly implied from the express power given Congress by the constitution. The bill became a law on February 25, 1791. Its chief provisions were:

**The First
United States
Bank**

1. The bank was to have a capital of \$10,000,000, divided into 25,000 shares of \$400 each. Eight millions of the capital stock were open to subscriptions by the people, one-fourth to be paid in specie and three-fourth in government bonds. The remaining two millions were to be subscribed by the government, payable in ten annual installments.

2. Each stockholder could cast one vote for one share of stock, one for the next ten shares, etc., but no shareholder could cast more than thirty votes. Foreign stockholders could not vote by proxy, and thus were practically prohibited from voting, the object being to prevent the bank from being controlled by a few individuals or by foreigners.

3. The bank was to be managed by twenty-five directors, all of whom must be citizens of the United States.

4. The bank could lend money on real estate security but could not hold title to real estate except temporarily, until it could be properly disposed of.

5. The bank could issue circulating notes to the amount of its capital stock. These notes were receivable for public dues as long as they were payable in gold and silver coin.

6. The head of the treasury should have the right to inspect all accounts of the bank except depositors' accounts, and could call for reports weekly if he desired.

7. The directors could establish branches as they chose for the purpose of deposit and discount.

8. The bank's charter was to run twenty years, and the government pledged itself to grant no other charter for a like institution during that period.

Branches were organized in New York, Boston, Baltimore, Norfolk, Charleston, Savannah, Washington and New Orleans, and the bank at once became a successful and prosperous institution. After the abandonment of the Bank of North America by the government as a place of deposit for public funds, the customs receipts of 1790 and 1791 had been deposited in state banks. These were drawn against for current outlays, and the cash receipts were placed in the Bank of the United States, thus gradually the accounts of the government in the state banks were depleted and extinguished and the national funds passed into the hands of the Bank of the United States. The great bank thus became the custodian of the government funds. It sold bonds, transferred funds from place to place as needed, and disbursed public money on warrants as directed by the treasurer. It also made loans to the government, and by 1795 these amounted to nearly \$6,000,000. The bank was a great financial success. By its policy of satisfactory dealings with the public and the government it maintained an excellent reputation. Its paper currency had the effect of giving stability and uniformity to the money of the country, and in many ways it contributed to the national prosperity and welfare, besides earning dividends at an average rate of 8½ per cent. for its stockholders.

The government was very slow with the payment of its installments to the capital stock of the bank and in 1796 the first, second, third, fourth and fifth installments were due and almost wholly unpaid. The government then began selling its stock to private individuals and by 1802 its entire interest had been disposed of. In 1809 Secretary Gallatin reported that the government had made a profit of \$671,860 on the sale of its stock in the bank. A large portion of the stock had passed into

the hands of foreigners, so that only 7,000 shares were owned by American citizens, while 18,000 were held abroad. The circulating notes outstanding at that time were \$4,500,000; specie on hand, \$5,000,000; loans and discounts, \$15,000,000. Thus the bank was in excellent condition, and the stockholders in 1810 applied for a renewal of its charter, enumerating in their petition to Congress the advantages which the bank had afforded the government, as a depository of the public funds; the transfer and disbursement of public money free of cost; loans to the government; a stable paper currency; profit from the sale of stock, etc.

A contest of extreme bitterness ensued. Secretary Gallatin strongly recommended the renewal of the charter, with an increase of the capital of the bank to \$30,000,000. Of this amount \$15,000,000 should be subscribed by such states as desired it, and branches should be organized in all states thus subscribing. In anticipation of the prospective war with England, Mr. Gallatin inserted a clause in the proposed charter obligating the bank to lend three-fifths of its capital to the government whenever required to do so. Just at this time the feeling against England ran high, and the fact that 18,000 shares of the bank were held abroad, mostly in England, aroused a strong feeling of resentment and opposition towards the bank. Mr. Gallatin reminded the

**Opposition to
Renewal of
the Charter**

people that foreigners had no voice in the conduct of the bank, and that in case the renewal of the charter was denied, it would be necessary to remit about \$7,200,000 abroad at once in settlement for the stock held there, that being its market value, and that the country could ill afford to spare that amount of specie on the eve of war, when every dollar would be needed at home, whereas if the charter was renewed it would only be necessary to remit to England the annual dividend of about $8\frac{1}{2}$ per cent., equivalent in effect to having an English loan of \$7,200,000 at $8\frac{1}{2}$ per cent. to aid us in the war. But such arguments only seemed

to inflame the opposition. Henry Clay, then just coming into popularity, threw his influence on the side against renewal, on the grounds that "the Constitution did not originally authorize Congress to grant the charter," hence a renewal of it would be unconstitutional for the same reason. Five years later Mr. Clay was a strong advocate of the establishment of the Second Bank of the United States, having reversed his former opinion on the question of constitutionality.

The decisive vote for renewal was taken in the House on January 24, 1811, and failed by a majority of 165 to 64. The Senate voted on a similar bill on February 20, resulting in a tie—17 to 17, whereupon George Clinton, the Vice President, cast the deciding vote against the bank. The bank went into liquidation and paid the shareholders \$434 for each share of \$400. Irresponsible state banks now sprang into existence everywhere, hoping to reap the profits heretofore enjoyed by the Bank of the United States. The country was flooded with paper money, secured by insignificant reserves. In this state of affairs, with its financial machinery disorganized, the country

**State Bank
Expansion**

in the following year entered upon a war with Great Britain. A more reckless and unfortunate condition of affairs could scarcely exist. Bank charters were very loosely granted by the various states, and in some instances banks were allowed to begin business before their capital stock had been actually subscribed, and they traded on the money received from depositors. At the time of the closing of the Bank of the United States in 1811 there were in existence eighty-eight state banks with a combined paper circulation equal in value to the notes of the United States Bank, and hence equal to gold, amounting to \$28,000,000. This number increased until in 1815 there were 208 banks with \$110,000,000 notes outstanding. This unwarranted increase in banks and paper money was fast placing the country in a condition where disaster was inevitable. In 1814, the British captured the city

of Washington and burned the White House. The news spread consternation throughout the country and caused a bank panic, resulting in the suspension of specie payments throughout the country, with the exception of portions of New England. There the laws had been more stringent and imposed a penalty upon any bank which should fail to redeem its notes in coin. This had the effect of restraining the over issue of circulating notes, and hence the New England banks were able to weather the storm, and kept their notes at par with specie throughout the crisis. Wherever specie payment was suspended, there depreciation

**Suspension
of Specie
Payments**

tion of the currency at once set in, and since the paper money was issued by banks in different states, under a variety of laws and conditions, the depreciation was not uniform. In New York it was 20 per cent., in Philadelphia 24 per cent. and in Baltimore 30 per cent. The citizens of New England paid their taxes and other obligations in money as good as gold, while those of New York, Pennsylvania or Maryland paid in depreciated paper. The injustice of this was apparent, but the government could not remedy the evil, since the depreciated paper was the only money to be had in a large portion of the country. Government bonds were selling at 85 cents on the dollar, although paid for in currency worth only 70 to 80 cents. To prosecute a war successfully under these conditions would seem a very difficult undertaking. Its success must have been due in a very large measure to the patriotism of the people. Many of the state banks scattered throughout the various states were government depositories, and held large amounts of government funds, but as the depreciated currency of one state would not circulate in another the government was unable to transfer the surplus it might have in one locality to places where it was needed to meet public demands. To overcome this evil, it became necessary to issue treasury notes.

The friends of the United States Bank ascribed all of the existing evils to the failure to renew the charter of the bank

and its resulting consequences, and this view was generally acquiesced in. If the bank's charter had been renewed \$7,200,000 in specie need not have been shipped to Europe to pay the stockholders, thus draining the country of a large part of its gold and furnishing England with money to prosecute a war against us. The increase in the number of state banks would have been prevented and their issues of paper money in excess of their power to redeem would have been avoided. Secretary Gallatin said: "Suspension (of specie payments) might have

**Regulator of
the Currency**

been prevented at the time when it took place had the former Bank of the United States been still in existence." During its life-time the bank had regulated the currency by means of its example, its strength, and the fact that it was the fiscal agent of the government. Its own notes were always equal to specie and the state banks were required to keep theirs up to the same standard, or otherwise they would be "thrown out" by the great bank, and no longer received for taxes and government dues. With a bank's notes thus discredited its customers would desert it for other and more responsible banks or for the branches of the United States Bank, located throughout the country. Thus the term "Regulator of the Currency" was not a misnomer when applied to the great Bank of the United States.

Notwithstanding the war was over a few months after the suspension of specie payments, and commerce resumed its customary channels, no effort was made by the state banks to resume specie payments. It was not to their pecuniary advantage to do so, as long as they could float a large volume of irredeemable paper money. A year passed and yet the banks showed

**The Second
United States
Bank**

no sign of attempting to resume. The welfare of the country demanded that something should be done, and yet Congress had not power to compel the state banks to change their policy. Naturally public opinion turned in favor of a new bank modeled on the plan of the

former one. President Madison, although opposed to the first bank on constitutional grounds, now in his message of December 5, 1815, suggested a national bank as a suitable instrumentality for bringing about the resumption of specie payments. Secretary Dallas urged the organization of such a bank, and on April 10, 1816, Congress passed a law creating the Second Bank of the United States, on lines similar to the first, with a capital of \$35,000,000. Later on Mr. Webster introduced a bill to the effect that after February 20, 1817, the secretary of the treasury should receive for public dues only treasury notes, the notes of the United States Bank and of those state banks which were paying specie on demand. This virtually compelled the resumption of specie payments on the date mentioned, after a suspension of two and a half years.

CHAPTER XXIII.

BANKING IN THE UNITED STATES.

**SECOND UNITED STATES BANK; THE GREAT BANK WAR; SUFFOLK
BANK SYSTEM; SAFETY FUND SYSTEM;
WILD CAT BANKING.**

The charter of the Second Bank of the United States was for twenty years. Its capital was \$35,000,000, of which amount the government subscribed \$7,000,000, and in consideration of this five of the twenty-five directors were to be appointed by the President. The main bank was located in Philadelphia and branches were established in different states wherever two thousand shares or more of the bank's capital had been subscribed. The bank and its branches were to have the deposits of the national treasury, transact exchanges, negotiate loans and perform other similar duties for the treasury free of charge. The bank

**Charter of the
Second United
States Bank** was allowed to issue notes in denominations of not less than \$5 on the same terms as the first bank, that is to say, its aggregate note circulation must not exceed its capital stock. Its notes were given preference over all others by being receivable for all dues to the United States. These notes were payable on demand, and in the event of the bank failing to redeem its notes or suspending specie payment, it was required to pay interest at 12 per cent. on its notes. Congress pledged itself not to grant a charter to any other bank during the life of the charter to this. Thus it will be seen that the Second Bank of the United States was similar in its main features to the first. It was larger, its note issues would be greater, and to prevent the bane of irredeemable paper money, a penalty in the form of interest was imposed upon it. It began business on January 7, 1817, and on the 20th of the fol-

lowing February specie payments were resumed and the country was once more upon a sound financial basis.

In 1819 the question of the constitutionality of the bank's charter was definitely decided by the Supreme Court of the United States in the case of the State of Maryland vs. McCulloch. The United States Bank had established a branch in Baltimore. The state of Maryland had enacted a law that all bank notes circulating within the state must be printed upon stamped paper for which a tax must be paid to the state. The branch did not use this paper and declined to pay the tax, whereupon the state brought suit for violation of the laws of Maryland against Cashier McCulloch as the officer of the bank. The contention was made that the branch bank was without warrant of authority under the laws of the United States, and that Congress had no power under the Constitution to create a bank. In passing upon this question the doctrine of implied powers was fully established. Since Congress has the power to lay and collect taxes, borrow money and regulate trade, it was decided that it had the power "to make all laws which shall be necessary and proper for carrying into execution the foregoing powers." In rendering the decision of the court in this important case Chief Justice Marshall said, "It is the unanimous and decided opinion of this court that the act to incorporate the Bank of the United States is a law made in pursuance of the Constitution. The branches, proceeding from the same stock, and being conducive to the complete accomplishment of the object, are equally constitutional," and hence the court declared that they were not subject to any state taxes or restrictions, since their usefulness might thereby be impaired or their existence even destroyed.

In 1819 a financial panic overspread the country. Banks and business houses failed in large numbers and general commercial distress and depression prevailed. It leaked out that irregularities had been practiced in the management of the

Bank of the United States, and Congress ordered an investigation. A shameful state of affairs was unearthed and the bank was found to be on the verge of ruin. The officials seemed to have been imbued with state banking fallacies and had paid little attention to the restrictions of their charter. They

Bank Scandals had discounted the notes of stockholders on the pledge of their stock as security to the amount of over \$8,000,000. They had also allowed stock to be sold and transferred before it was fully paid for. They even advanced more than the par value of the stock in some instances. Among the requirements of the charter was one that there should be no dividends paid on shares that were not fully paid. This provision had been repeatedly violated. The president and cashier of the Baltimore branch had helped themselves to large amounts of money on scant security, and withal the bank was well nigh insolvent. It was saved from complete failure by its new president, who borrowed \$2,500,000 in Europe, and took heroic measures to make stockholders pay up. From this experience in our banking history we learned the lesson that a bank should not loan money on its own shares, much less those which are not even paid up, for in order to realize on the security it must impair its own capital. Such loans when in default become equivalent to the purchase of a bank's own stock and that is the same as partial liquidation. In a time of stringency such a practice will almost surely put a bank in jeopardy. The Bank of the United States got itself into this predicament in the panic of 1819, and had it not been for the loan secured in Europe and the treasury balance on deposit there, it would have been forced to close its doors.

Under proper management the bank gradually regained its wonted strength, and thereafter controlled the financial system of the country, rendering valuable service in its capacity as "Regulator of the Currency," and as the fiscal agent of the government. The people as a whole regarded the institution as their

deliverer from the evils of a debased money system, and, with the exception of a few disgruntled borrowers, together with stockholders whom the bank compelled to pay up, and the state banks who had been forced to redeem their notes, it appeared to be solid in the confidence and good will of the people. Imagine, then, the general surprise when in 1829, General Jackson in his message attacked the bank, and declared that it had "failed in the great end of establishing a uniform and sound currency."

**Jackson's
Hostility to
the Bank**

People who knew anything about the matter must have known that this statement was false, and yet so great was the popularity of the old hero that many were willing to accept anything he said. General Jackson's opposition to the bank could not have been caused by financial reasons. He was no doubt led to believe that the bank had been hostile to his election and he proposed to destroy the "monster." President Biddle of the bank declined to allow political affairs to influence or in any way meddle with the management of the concern, and intimated that he needed no advice from the White House. All of this aroused President Jackson's ire and he became convinced that the bank was a giant monopoly dangerous to the welfare of the government and people, and that it was his duty to destroy it.

On the other hand, the National Republican party, headed by Clay and Webster, immediately took sides as defenders of the bank against President Jackson. Although the bank's charter would not expire until 1836, a bill was introduced into Congress in the Spring of 1832 and passed for a renewal of the charter. It went to President Jackson in July and he vetoed it with a ringing document. President Biddle of the bank was reported as having said that he would defeat President Jackson for re-election on account of his veto of the bank bill. This threat aroused the General, and he declared "By the Eternal that is too much power for any one man to have in this country," and was then more than ever determined to destroy the bank. The

presidential campaign was then on, Henry Clay being the opponent of General Jackson, and the leader of the friends of the bank. The bank charter was the chief issue of the campaign, but Jackson's popularity was so great that he won re-election by an overwhelming majority. Taking his re-election as an endorsement of his position on the bank question, President Jackson proceeded to deal the death blow to what he considered his enemy. On the pretext that the bank was unsafe he ordered the secretary of the treasury to remove from it the government deposits, and place them in certain state banks. Secretary Duane refused to do this, and Jackson removed him and appointed Roger B. Taney in his stead. Taney carried out the wishes of his superior. No more deposits were made in the United States Bank and warrants for current expenses soon exhausted the government balance there.

The government funds were then deposited with state banks carefully selected with reference to party loyalty. This raised a storm of protest from Jackson's political opponents, who branded the proceeding as unlawful, being a violation of the contract under which the bank came into existence. The bank had paid \$1,500,000 as a bonus for the government deposits during a period of twenty years and now it was deprived of the benefits of these deposits three years before the expiration of the time. Party feeling ran high, and in the ensuing Congress a resolution of censure was passed by both houses as follows: Resolved, that the president, in the late proceeding in relation to the public revenue, has assumed upon himself authority and power not conferred by the constitution and laws but in derogation of both." The president protested against the proceeding, but the resolution stood upon the records until 1837, when it was expunged in an all-night session of the Senate, after a fierce party struggle.

The withdrawal of the deposits was a serious blow to the

The Great
Bank War

Deposits
Removed

Bank of the United States, but it continued on until the expiration of its charter in 1836. It then took out a charter as a state bank, and continued business until 1841, when it failed. Nicholas Biddle was reduced from wealth to pauperism. Thus ended the great bank war, in a triumph for President Jackson. Specie payments were suspended again in 1837, the only retaliation against Jackson's victory, and the country was again to struggle for a time with state banks and wildcat currency.

The state banks in existence in 1833, when Andrew Jackson transferred the deposits to them, were of all kinds, based upon every conceivable system and form of legislation. It seemed as though the period of nearly thirty years just prior to the enactment of our National Banking Act was to be used for testing every theory and making every experiment that could be necessary in order to culminate finally in the national banking system. The banks in Massachusetts were the best managed. Being under severe restrictions, and a penalty in case of failure to pay specie on demand, they were the most stable. The "Suffolk Bank System" of Boston also acted as a powerful check against improvident management. This system arose from the determination of the solvent banks of Boston to compel the smaller banks located in the remote corners of the state to redeem their notes by keeping on deposit in Boston a fund for this purpose.

**Suffolk Bank
System**

The notes were presented daily through a clearing house, in very much the same way as checks are cleared. Any bank refusing to keep a fund for this purpose was liable to have its notes thrown out or refused, and thus be discredited. This system, which at one time included over five hundred banks, served to restrict note issues and proved a valuable expedient for the time being.

In New York the "Safety Fund System" was established, by which each bank was required to deposit with the state treasurer three per cent. of its capital as a fund for the security of note holders and depositors. In case the fund became exhausted

all the solvent banks were to be taxed to replete it. The fund was afterwards set aside for the protection of note holders only,

Safety Fund System it having been found wholly insufficient to protect both note holders and depositors. The "Safety Fund System" resembled in many respects the

present Canadian banking system, which has a safety fund of five per cent. as a protection for note holders. Other expedients were tried in various states. In some of them the state had a voice in the management of the banks and in others it was a sharer in the profits. Thus the country went, feeling its way, until the panic in 1837 caused hundreds of banks to fail, no doubt covering up many an instance of defalcation and dishonesty. That panic proved that the safety fund system of New York was wholly inadequate, and that state then adopted

Free Banking System the "Free Banking System," which permitted anyone to form a bank and issue notes without a charter from the legislature, as had been the custom in the past. The notes must be based, however, upon either United States bonds or bonds of the State of New York, or approved real estate security, deposited with the state treasurer. In case of the failure of a bank the state treasurer was authorized to sell the securities and apply the proceeds to the redemption of the outstanding notes of the bank. Other states copied after the free banking system of New York, and it became very popular. The merits of the system depended chiefly upon the quality of the securities and the convertibility of them in a time of stringency. Real estate mortgages were subject to great depreciation and at forced sale bonds often brought much less than their face value.

In some other states no adequate attempt was made to protect the note circulation or supervise the banking system, and the result was a large number of banks of the most irresponsible character, many of them permeated with dishonesty, so bad as to win the title of Wild Cat Banks. Senator Sherman, in his "Rec-

ollections," referring to wild cat banking in the 40's and 50s, says: "We had every diversity of the bank system devised by the wit of man, and all these banks had the power to issue paper money. There was no check or control over them." Manifold evils resulted from this want of uniformity and of public regulation. Counterfeiters plied their dishonest practices to an alarming extent, and there were 5,400 spurious notes catalogued as being in circulation at one time. "Counterfeit Detectors" and "Bank Note Reporters" were important publications to which bankers and merchants subscribed, in order to be posted on the spurious bills in circulation. Disputes between buyer and seller as to the goodness of the bank notes were of almost constant occurrence, and if there was a bank in the town the cashier was constantly appealed to for his opinion on the genuineness of notes in circulation.

**Wild Cat
Banking**

CHAPTER XXIV.

BANKING IN THE UNITED STATES.

NATIONAL BANKING SYSTEM; ORGANIZATION; RESERVE; CIRCULATION; SUB-TREASURY SYSTEM.

When the Civil War broke upon the country it found the national government illy prepared to meet the enormous expenditures which a war entails. The treasury was almost empty, and yet vast amounts of money were needed at once. Gold had been hoarded and exported in anticipation of war to such an extent that in the winter of 1861 the banks suspended specie payment. This left no circulating medium except the state bank notes. In 1862 and 1863 the government, to relieve the situation, issued \$450,000,000 of government notes, called "greenbacks," with which it purchased the munitions of war and paid its expenses, but depreciation set in and further issues of such notes were stopped. It then became necessary for the govern-

U. S. Bonds ment to borrow money, and issue its obligations in the form of bonds. In order to find a market for those, Secretary Chase, of the treasury department, proposed to offer as an inducement to their purchase certain banking privileges. He worked out the scheme of our national banking system and urged the organization of national banks, first in his report of December, 1861, and again in 1862. The chief points of advantage in his scheme were that it would create a demand for government bonds, in return for which the national treasury would receive large amounts of much needed cash, and second it would give the country a safe, uniform and stable note circulation. After much consideration Congress passed the National Banking Act, and in February, 1863, it received the president's signature and became a law.

The original act was crude and unsatisfactory and has been often amended, but the general features of the system remain. In 1864 an amendment was made forbidding national banks from making loans on landed security, which had been permitted by the original act. The law was so framed as to enable state banks to become members of the national system by the simple process of conversion without reorganization. Every inducement was made to the state banks to lead them into the system, but they were slow to make the change. On March 3, 1865, a law was enacted imposing a ten per cent. tax per annum upon the note issues of all state banks. This was a death blow, as it was intended to be, and drove the state bank notes out of existence, leaving the field clear to the national bank circulation. Following this law the state banks rapidly came into the national system, and on the first of January, 1867, there were \$291,093,294 of national bank notes in circulation. The large increase in the number and capital of the national banks meant an increased demand for government bonds, which in turn meant vast receipts of cash to the government treasury. Government bonds had been previously selling at 7 per cent. discount. The demand raised their price above par and thus the system proved of the greatest assistance to the government.

But the 10 per cent. tax which virtually made state bank issues unprofitable and hence impossible, aroused considerable opposition on the part of the state bankers. Congress was accused of overstepping its constitutional limitations in its attempt to interfere with state institutions. Suit was brought by a bank in Maine to recover the tax which it had paid, and in the brief submitted to the United States Supreme Court, the contention was made that the state had a right to charter a bank and empower it to issue circulating notes. This right had been exercised by all of the states from the foundation of the republic, without objection

Conversion of
State Banks

Constitutional-
ity of the Law

or interference from Congress. It had been recognized and upheld by the Supreme Court itself in a previous case. Now to subject the bank to a tax of ten per cent. was virtually to destroy this right, and thus encroach upon the prerogatives of the state in a manner unwarranted by the Constitution. The court decided that "Congress had the undisputed power to provide a currency for the entire republic, and that in the exercise of that power it might, if it saw fit, by taxation or otherwise restrain the circulation of any notes not issued by its immediate authority."

Thus was formed a national banking system infinitely more powerful than the bank which Jackson waged a war upon, on account of his belief that it concentrated too much power in the hands of a few men, but a system which has proven all of Jackson's fears to be groundless. The favoring conditions in the formation of the national banking system were the stress of war, and the assumption of implied powers by the government made necessary in order to carry on its struggle for existence.

The principal features of the national banking system are as follows:

A currency bureau has been established as a department of the treasury, under the management of an officer called the Comptroller of the Currency. This bureau is charged with the execution of the banking law and the regulation of all details of the organization and management of national banks, the issue to such banks upon receiving their deposits of United States bonds, the appointment and supervision of inspectors of banks, etc. The Comptroller must not be interested in any national bank either directly or indirectly. He must make an annual report to Congress of the conditions of all national banks.

At least five persons are necessary to form a national bank. Articles of association setting forth all of the details concerning the proposed bank, its name, place of business, capital, etc., are

Currency
Bureau

signed by the five stockholders and transmitted to the Comptroller at Washington, who, upon approving them and satisfying himself as to payment of the capital and compliance with other requirements of the law, issues a charter for twenty years. This charter may be renewed for a like term of twenty years. The law authorizes national banks to exercise by its board of directors or duly authorized officers or agents, subject to law, all such incidental powers as shall be necessary to carry on the business of banking; by discounting and negotiating promissory notes, drafts, bills of exchange and other evidences of debt; by receiving deposits; by buying and selling exchange, coin and bullion; by loaning money on personal security, and by obtaining, issuing and circulating notes." But they are not permitted to loan money on real estate security or hold real estate except such as is necessary for the conduct of the business, or may have been acquired in liquidation of previous obligations, and then only until it can be disposed of without sacrifice.

**Organization
of National
Banks**

**Scope of the
Business**

**Directors
Stockholders**

The affairs of the national banks are managed by a board of not less than five directors, elected annually by the stockholders, as in the case of other corporations, except that all directors of national banks must be American citizens, and own at least ten shares of stock. Stockholders are under the "double liability" obligation, i. e. every stockholder is liable for all of the debts and liabilities of the bank to the extent of the amount of the par value of his stock and as much more besides.

At least one-half of the capital stock must be paid in before beginning business and the balance in five equal monthly installments. The amount of the capitalization of the bank is also controlled by law, and depends upon the population of the town or city in which the bank is to be located. In cities of 3,000 or less population the capital must not be less than \$25,000, in

cities of more than 3,000 and less than 6,000 the capital must be not less than \$50,000, in cities of more than 6,000 and less than 50,000 the capital must be not less than \$100,000, and in cities of 50,000 or over it must be not less than \$200,000. A bank with a capital of \$150,000 or less must deposit with the Treasurer of the United States government bonds equal to one-fourth its capital. A bank with a greater capital must deposit at least \$50,000 in bonds. These bonds may be used as a basis for circulating notes or not, according to the option of the bank. No bank is compelled to issue notes.

Capital A national bank may issue circulating notes to the amount of 90 per cent. of the par value of the government bonds deposited with the Treasurer of the United States.* The Comptroller furnishes suitable notes, in blank, in denominations of \$5, \$10, \$20, \$50, \$100, \$500 and \$1,000, and these when signed by the officers of the bank are ready for issue over the bank's counter. Bank notes are receivable in all parts of the United States in payment of taxes, excises, public lands, and all other dues to the United States except duties on imports and interest on the public debt.

Circulation Each national bank is required to keep on deposit with the Comptroller of the currency a deposit equal to five per cent. of its circulation, as a fund for the redemption of its worn out or mutilated notes. When notes become worn, defaced or mutilated so that they are no longer fit for circulation they will be replaced with new notes by the Comptroller. The old notes are then "macerated" or destroyed by the process of grinding them to a pulp. Whenever the redemption of notes for any bank amounts to \$500 it is called upon to replenish its deposit.

Any bank desiring to reduce its volume of circulating notes may do so by paying into the United States treasury either the

*This was the original provision of the law, but by the Act of 1890 the limit was raised to the par value of the bonds deposited.

notes themselves or a sum of lawful money with which the Comptroller may redeem them, and a corresponding amount of government bonds will then be released from deposit and returned to the bank. To prevent any sudden or serious contraction of the currency of the country, the law prescribes that not more than \$3,000,000 of notes shall be retired by all of the banks in any one month. Of course no bank can withdraw bonds below the minimum required to be deposited irrespective of circulation. Certain enumerated cities in various parts of the country are denominated "reserve cities," among which are New York, Chicago, Boston, Cincinnati, Baltimore, Albany, Cleveland, Detroit, Philadelphia, St. Louis, San Francisco, Milwaukee, Louisville and Washington. The banks in these cities are required to keep on hand a sum of money equal to 25 per cent. of their deposits. Banks in other cities are required to keep a reserve of 15 per cent., but three-fifths of this may consist of deposits with banks in reserve cities. The five per cent. redemption fund on deposit with the Comptroller may be counted as a part of the reserve. When a bank's cash falls below the reserve limit, it is forbidden to increase its liabilities by making new loans or discounts, or to declare further dividends until the cash reserve is restored. Failure to restore the reserve may subject the bank to forced liquidations at the discretion of the Comptroller.

The safety of the banks is guarded by the law through a number of wholesome restrictions, among which are, that no real estate acquired under judgment decrees or mortgages may be held for more than five years. Not more than one-tenth of the capital of the bank may be loaned to one individual, corporation or firm, directly or indirectly, nor may any bank lend money on its own shares, but they may be taken as security for a debt previously contracted in good faith. Unearned dividends must not be

declared. If the capital is impaired by losses, the deficit must be made good by an assessment on the shareholders if necessary. One-tenth of the net profits must be annually added to the surplus fund until the fund shall amount to 20 per cent. of the capital.

Every national bank is required to make not less than five reports of its condition each year to the Comptroller, verified by the oath of the president or cashier and the signatures of at least three directors. In addition to this special reports as to dividends and earnings are made each half year.

**Report
Examiners**

Reports are usually called for a prior date, so as to give bank officials no opportunity to patch up affairs. As a further safeguard, bank examiners are employed by the Comptroller, whose duty it is to make a thorough examination of the affairs of all national banks, inspect books, securities, assets and liabilities, and report the results of such finding to the Comptroller.

The Comptroller also has charge of the settling up of the affairs of failed national banks. He appoints the receivers and fixes their compensation. All money received for the assets of the bank is turned over to him and he pays out dividends to creditors. The Comptroller also declares the bonds held for security of circulation forfeited, and gives notice to the holders of all notes of the defunct bank to present them at the treasury for payment.

**Liquidation of
Failed Banks**

In the early days of the national banking system circulation was extremely profitable. Government bonds bore five and six per cent. interest and kept constantly increasing in value, and this, added to the profits on circulation issued against the bonds, acted as a strong inducement to the organization of national banks. In consequence of this increase in the number of banks of issue the volume of bank notes constantly rose until in December, 1874, it amounted to \$354,394,346. From this point it experienced a slight falling off until in 1883 it reached high

water mark in a volume of \$362,651,169. The retirement of bonds by the government and refunding them at lower rates of interest then acted to reduce the volume of circulation and it ran down in 1891 to \$167,927,974. Since then

Volume of Bank Note Circulation it has shown increases whenever there have been new issues of bonds. The act of 1900 permitted banks to issue notes to the amount of the paid in capital and to 100 per cent. of the market value of the bonds deposited, provided this did not exceed their par value. The tax on circulation was reduced from one to one-half per cent. and the effect has been an increase in the volume of bank note circulation.

It will thus be seen that the aggregate circulation depends approximately upon the current price of bonds and not upon the demands of business. When it is profitable to issue notes the banks do so, and when the market price of bonds insures to their owners better profits than by the deposit of them to secure circulation, then the banks contract their circulation. It thus happens that frequently when there is the greatest need of a large circulation in order to carry on the business of the country, the price of bonds makes it advantageous to the banks to reduce the volume of their notes, and surrender their circulation. This is one of the serious defects of our currency system. Real elasticity, whether of contraction or expansion, to adapt its volume to the needs of business is unknown under this system. But were expansion and contraction even possible under our system, it would be too slow and cumbersome to meet the requirements of business. Bonds must be sent to Washington, notes must be printed, forwarded and signed, all entailing a delay of several weeks, before the money is ready for circulation. A money stringency might arise, produce its unfortunate results and subside before the needed relief could be obtained through the channel of the expansion of bank note circulation.

The sub-treasury system of the United States seems to ag-

gravate rather than correct the shortcomings of our bank note circulation, by locking up in the vaults and thus withdrawing from circulation many millions of dollars more than the government requires to meet its current obligations just at a time when it is most needed in circulation. Under our system of indirect taxation this locking up of money proceeds at a greater rate when business is prosperous and a larger volume of currency is needed in the channels of trade than when business is dull, for the reason that in active times importations are greater and the consumption of those luxuries which are taxed under the internal revenue law is greater, thus increasing the government receipts both from customs and internal revenues.

**Sub-Treasury
System**

A system of asset banking somewhat after the Canadian method has been advocated for the United States as a relief from the objections to the sub-treasury system and the fast and hard rules of the National Banking Act. Certain it is that we need a more elastic circulating medium, and it is almost equally certain that a system of branch banking would be a decided advantage to the country. The National Banking Act has served the country so long and well that there is a reluctance to displace it, but there is also a strong feeling that reform is needed in our currency system to adapt it to changing conditions.

In order to maintain the country upon a specie basis it is necessary for the United States treasury to keep a large specie reserve on hand. The amount of this reserve has been fixed at \$150,000,000.* Under the "parity" clause of the act of 1890 it was declared to be the policy of the United States to maintain the two metals (gold and silver) on a parity with each other. In order to do this, when treasury notes are presented for payment, they are paid in either gold or silver, as the holder demands. In the spring of 1893

**National
Reserve**

*This amount was originally \$100,000,000, but was increased in 1900 to \$150,000,000.

the reserve in the treasury fell below the \$100,000,000 mark, owing to large exportations of gold. By the following January the reserve had fallen to \$65,650,000, and a feeling of fear spread over the country lest the treasury should be unable to maintain the reserve and values should go to a silver basis. The Secretary of the treasury sold \$50,000,000 gold bonds on about a three per cent. basis and replenished the reserve. The redemption of notes continued, however, and by the following August (1894) the reserve had fallen to \$52,000,000. In the following November another issue of \$50,000,000 was made to restore the reserve. In January, 1895, \$65,000,000 more of gold bonds were negotiated and the proceeds placed in the reserve, and in February, 1896, a fourth issue of \$100,000,000 of bonds was resorted to, which served to maintain the reserve until the tide turned and gold began to flow into instead of from the United States treasury. This process of redeeming treasury notes in gold and issuing them again only to have them in turn presented for redemption in gold again, was called "the operation of the endless chain."

Prior to 1861 no notes not bearing interest were issued by the United States treasury, but on July 17, 1861, Congress directed the issue of \$50,000,000 of demand notes in denominations of less than \$50 in exchange for coin or in payment of debts due the government. These were the first "sinews of war" in the form of "greenbacks." The act of February 25, 1862, increased the issue to \$150,000,000. These notes were a legal tender for all debts public and private except customs duties and interest on the public debt. On June 11, 1862, Congress increased the issue to \$300,000,000 and on March 3, 1863, to \$450,000,000. After the war Congress gradually reduced the volume, but by the act of April 12, 1866, limited the retirement to \$10,000,000 monthly for six months and \$4,000,000 monthly thereafter. During the panic of 1873 the retirement of notes was discontinued

United States
Notes

and the volume outstanding increased by nearly \$27,000,000, bringing the total up to \$382,979,815. But the act of January, 1875, provided for further reduction, and declared that on January 1, 1879, specie payment should be resumed. In order to prepare for the resumption of specie payments it was deemed wise in May, 1878, to prohibit the further cancellation of "green-backs" and the amount has therefore stood ever since at \$346,681,016, as it was at the close of business on the day the act went into effect.

The secretary was authorized by the act of March 3, 1863, to receive deposits of gold coin and bullion and to issue therefor certificates in denominations of \$20 and upward, payable on demand. The coin was to be held in the treasury for the redemption of the certificates. There were in circulation on July 1, 1901, gold certificates amounting to \$247,036,359. These certificates are not a legal tender but are receivable for customs, taxes and all public dues. They are also available for the reserves of national banks.

Silver certificates are issued upon deposits of silver dollars, under the act of February 28, 1878, which authorized the coinage of the dollars. At first all deposits were limited to \$10 or a multiple thereof, and certificates were issued only in like denominations, but the act of 1886 provided that certificates might be issued in denominations of \$1, \$2 and \$5. The issue is limited to the amount of silver actually deposited in the treasury. The certificates are not a legal tender, but may be held by national banks as a part of their reserves. The volume of silver certificates outstanding on July 1, 1901, was \$429,643,556.

Gold and Silver
Certificates

CHAPTER XXV.

BANKING IN THE UNITED STATES.

STATE BANKS; PRIVATE BANKS; SAVINGS BANKS; TRUST COMPANIES.

A large number of banks exist and flourish under state regulations. Many of them were organized and engaged in business prior to the formation of our national banking system and declined to enter that system, but the larger portion have since been organized from time to time to meet the real or supposed needs for better banking facilities in the communities in which they are located. As previously stated, by an amendment to the National Banking Law in July, 1866, the government imposed a tax of ten per cent. upon the note circulation of all state banks. The purpose of the tax was to drive the state bank notes out of circulation and thus make room for the national bank currency, and it accomplished its purpose perfectly. In other respects, however, the state banks were unaffected and have continued to do business in the same way, subject only to the regulations imposed by the laws of the states in which they are situated. A state bank discounts notes and drafts, receives deposits, buys and sells exchange and performs all the regular functions of any bank. Its internal mechanism and organization of officers and clerks is substantially the same as those of a national bank. The state laws usually require a directory of five or more persons to manage the affairs of the bank, and it must be a regularly organized corporation, formed and conducted in compliance with the statute. .

While national banks are usually considered as possessing decided advantages over state institutions, the latter in turn have, in the opinion of some bankers, decided advantages, among

which may be mentioned: They are not subject to such severe restrictions as to capital, reserve, etc.; are not examined so critically; are not, in many states, required to make reports or returns; have greater liberty in the making of loans, and may certify checks in excess of the amount which the depositor has on deposit. This latter right is strictly and rigidly denied to national banks, and at first thought would seem to be only a wholesome restriction as applied to any bank, but in certain classes of transactions, notably those connected with the stock exchange, it may be necessary for a bank to certify in excess of the deposit. While the practice is clearly objectionable it may be necessary under certain conditions. The banking laws of the different states are very dissimilar and produce the same variety in the character of the banks formed under them, so that in order to understand the requirements and restrictions under which state banks exist, it will be necessary to consult the statutes of the different states.

Next lower in the order of size and importance come the private banks.* These differ from state banks, being usually not corporations with a fixed capital divided into shares and controlled by a board of directors, but having an indefinite capital owned entirely by one or more persons. The stockholders in a state bank are limited in their liability to the bank, but in the case of a private bank the owners or stockholders (in case of a stock company) are individually responsible for the liabilities of the bank without limit. Private banks usually grow out of favoring conditions. In a town too small to justify the organization of a national bank with a capital of \$25,000, and yet needing banking facilities, a leading merchant who is well known as a responsible man, decides to open a bank as an annex to his store. His bank commands the confidence of the public, on account of his repu-

*In 1902 there were 1,302 state banks in the United States, according to the Comptroller's report.

tation for wealth, character and honesty. Or some man who is in the habit of buying notes or making small loans at remunerative rates, finally concludes to enlarge his office, and hangs out his sign as a banker. The capital of a private banker may be small, but he is well known in the community and is esteemed for his ability and integrity. His bank is not subjected to any examination by state or national authorities, nor is he required to make reports or publish statements of the bank's condition. Such is the origin of many of the private banks. As the resources of the community grow and the business of the private bank gradually expands, it is frequently organized into a state bank or merged into the national system.

As to the details of management of private banks, these are, or should be, in compliance with the rules of larger institutions.

Even private bankers cannot ignore the rules of
Management safe banking without sooner or later suffering the consequences. In rare instances the practice has been adopted by private bankers of making public reports of their condition, and these reports have been published along with those of state and national banks, as a means of inspiring public confidence. The private banker can offer to his customer the advantages of unlimited liability for every obligation of the bank, and a greater concentration of responsibility, with a stronger sense of direct personal interest in the welfare of the concern than is felt by either the directors or officers of incorporated institutions, either state or national. The best guaranty which a customer can have of the soundness of his bank is the integrity and ability of its management, and the private banker can offer this as well as the state or national bank.

SAVINGS BANKS.

During the latter part of the 18th century there seemed to be a general advance in the spirit of fraternal and provident societies in Europe and especially in England, and out of this

grew the mutual savings bank as a means of taking care of the poor who came to want by improvidence or misfortune. The earliest institution of this kind was established in 1765, but not until about the close of the century did these institutions become permanently established. In 1816 and 1817 the need of savings

Origin of Savings Banks banks became apparent in New York and Boston. The country was then becoming well settled and the people were able to accumulate a surplus out of their earnings, but poverty prevailed throughout the country generally, on account of the improvidence of the people, who squandered their earnings and paid no attention "to those small but frequent savings when labor is plentiful which may go to meet privation in unfavorable seasons." A bill was introduced into the New York legislature in 1819 and passed, for the incorporation of savings banks, and continues, with some modifications, as the basis of the savings bank system of the state at the present time.

In 1900 there were in the United States 1,007 savings banks, with deposits aggregating approximately \$2,600,000,000, held in the name of 6,000,000 depositors. This vast sum represents the accumulated savings of a large class of people, especially those who are inexperienced in handling or investing money and whose savings are too small to loan or invest to advantage. The

Character savings bank offers to the weak the aid of the experienced who understand finance, to receive their small gains and hold them securely against that time when need or desire may require the store for prudent use. "It accumulates money; it inspires and trains men to get money and to the wise use of it; it adds to the sum of national resources in money, and adds to the means for advancement in material improvement." Many state banks combine the functions of banks of discount with those of private savings banks, and while the character of the two are entirely different there is no conflict between them. The savings bank aims to gather wealth

while the commercial bank uses it, and turns it into the channels of business. The profits of the savings bank, of the mutual kind, go to the depositors, while the profits of the ordinary commercial bank go to the stockholders or owners. "The savings bank opens its doors to savers; it receives and permanently invests money. The bank opens its doors to borrowers and users of money, for pay. One serves by receiving and keeping, the other serves by lending. The savings institution is a receiving reservoir from little springs; the bank is a distributing reservoir of accumulated capital."

Savings banks in the United States differ from those in England in not being required to invest their funds exclusively in government securities. Thus of the \$2,600,000,000 on deposit in our savings banks in 1900, 30 per cent. was loaned out on real estate, 18 per cent. invested in state and other stocks and bonds, 11 per cent. in railroad bonds and stocks, and 3 per cent. in government bonds. While the ordinary discount bank must keep its funds as free as possible from permanent investments such as real estate loans, the savings bank pursues exactly the opposite course, its favorite form of investment being real estate loans. The savings bank does not hoard its money. It does not engage in speculation, but makes investments in solid securities of recognized value.

In the eastern states nearly all of the savings banks are conducted upon the mutual plan. Their capital consists of the deposits, and the depositors are the owners of the bank. The business of the bank is managed by a board of trustees who receive no compensation for their services. The only salaries paid are to those officers and clerks who give their entire time to the business. The income arises from interest on loans, and after taxes and running expenses are paid, the net profits go to the depositors as interest or dividends. This system seems to most nearly accomplish

the object for which such institutions were formed, as it gives the depositor the full benefit of whatever profit may arise from the conduct of the business.

In the western states and on the Pacific coast most of the savings banks are private institutions, organized and conducted for the benefit of the owners, the same as other banks, and paying a fixed rate of interest to depositors. Such institutions have a fixed capital and maintain a reserve to meet withdrawals and secure the confidence of the public. They

Private correspond to state banks, being usually subject to certain requirements and restrictions of the state laws, intended for the better security of depositors. Of course it is largely a question of management whether a savings bank is secure or not, either by the mutual or private system. All the law can do is to hedge about the interests of depositors and place restrictions upon officers. The depositors themselves must judge as to the ability and integrity displayed in the management of the institution.

The rules for the conduct of the business differ widely in different savings banks. Some receive deposits as low as a dime, while a dollar is the limit in others. Some allow interest only on the smallest balance of the half year, while others compute the interest upon monthly balances. Money withdrawn before the end of the month or half year is not entitled to interest for the time it was on deposit. Most banks, as a means

Rules of protection to themselves, may require thirty or sixty days' written notice from depositors before money can be withdrawn. This regulation is only enforced in time of panic to enable the bank to realize on its loans or securities.

TRUST COMPANIES.

During the past twenty-five years there has developed in the United States a class of financial institutions called Trust Companies, combining the functions of a bank with those of a

fiduciary agent. They receive deposits and make loans, but of a different character from those of ordinary banks. It is the policy of conservative banking to make only short time loans, and upon collaterals or upon mercantile paper—such as is given for goods sold. Every commercial bank aims to avoid getting its funds locked up in fixed property such as real estate, upon which it would be difficult to realize in case of a financial stringency. On the other hand, trust companies aim to make long time loans on real estate or other sound security. Their money consists largely of trust funds belonging to estates, for which they act as administrators, executors or assignees, and from the nature of these deposits they are privileged to loan them out on long terms. Trust companies act as conservators of those who are not competent to manage their own estates, guardians of minor children whose estate they may hold until the heirs reach majority, when it is divided; assignee and receiver in cases of insolvent firms or corporations, etc. They also act as trustee in corporation mortgages, and registrar and transfer agent in case of bond issues by railroads and other large corporations. They do a general financial business for bankers and others, collect rents and interest, make investments, hold titles, pay annuities and execute wills and other trusts. With the growth of capital and complications of investments, trust companies have become important agents in our financial and commercial system, and are now almost a necessity in floating bond issues and promoting large enterprises. They are state institutions, being organized under statutes or special charters from the legislatures of the states in which they are located.

**Banking
Functions**

**Functions
of Trust
Companies**

Suppose some large enterprise is to be carried through, such as the building of a railroad, requiring a large capital, much in excess of that which the managers or promoters of the enterprise would be able to furnish of their own. Many other people

are able and willing to furnish funds for the enterprise, but at once the query arises, How do they know that their investment will be a safe one? How do they know that the company has been properly organized; that the title to the property is clear and perfect, and that there has been no over issue of bonds? Each prospective investor could insist upon investigating the affairs of the company and having all of these and many other

**Financing an
Enterprise**

similar queries answered to his satisfaction before parting with his money, thus making the financing of the enterprise almost impossible. Just here the trust company is very serviceable. By assuming the registration and issue of the bonds, the character of the securities, so far as genuineness, title, etc., are concerned, is established. The trust company takes title to the property under the mortgage, issues the bonds, pays the interest, and in fact transacts the whole business, turning over the proceeds from the sale of the bonds as the money is paid in. Purchasers of bonds rely upon the trust company to see that there has not been an over issue of the bonds.

Another important service rendered by trust companies is in issuing stock for large corporations, and in case of sale, making transfers of same. When the stock is listed on the stock exchange this is an assurance to buyers that the stock is genuine, and there has not been an over issue. Then again, it enables purchasers to have the stock properly transferred without the necessity of sending the certificates to the headquarters of the company, which may be a considerable distance away. For instance, a corporation in Omaha desiring to have its shares listed on the Chicago Stock Exchange may make an arrangement with a trust company in Chicago to attend to the registration and transfer of its stock, as a convenience to buyers, and it is not then necessary for a buyer to send his certificates to Omaha to be transferred. That can be done by the trust company here.

CHAPTER XXVI.

BANKING IN THE UNITED STATES.

THE UNITED STATES TREASURY.

As before related, President Jackson removed the government funds from the United States Bank in 1833, and placed them in various state banks, located in various parts of the country, on the plea that the bank was unsafe. This he did, not by actually removing the money, but by a process which resulted the same—depositing all fresh receipts of cash in the state banks and drawing all government warrants for payments of money against the balance in the United States Bank until that balance was exhausted. Prior to this time the government had kept its funds in its own banks, or those which it virtually controlled, with the exception of an interval of five years (1811-1816) between the expiration of the charter of the First and the formation of the Second United States Bank. These government banks had, during a period of nearly forty years (1789 to 1811 and 1816 to 1833) performed two highly useful and important functions in connection with the financial system of the country—they had acted as the fiscal agent of the government in collecting and disbursing the public revenues, and they had maintained a uniform standard of value in the money of the country. During the period (1811 to 1816) when there was no government bank as a “regulator of the currency” the people suffered severely through the uncertainty of credit and the effects of a depreciated and fluctuating currency. It was political strife that brought about the removal of these deposits, and not economic reasons. The state banks at that time were generally conducted with the utmost disregard for not only safe banking methods, but very

Removal of
the Deposits

frequently the principles of honesty as well. They were so far removed from the direct control of the government that the finances of the country, when dependent upon them, were left in a state of uncertainty and demoralization. To make matters worse the treasury department on September 26, 1833, followed up the transfer of its deposits by issuing a circular to the deposit banks in which occurred the following statement: "The deposits of public money will enable you to afford increased facilities to commerce, and to extend your accommodations to individuals." Acting upon the hint, the banks loaned out the government deposits, the era of speculation set in, the state banks inflated their currency with greater issues of bank notes, and things ran riot until the culmination was reached in the panic of 1837. Nearly all the banks failed. They held \$32,000,000 of government deposits, a large portion of which was lost.

It then became apparent that the government must keep its money in its own vaults. Two attempts had been made at the policy of entrusting them to the state banks (1811-1816 and 1833-1837) and both had proven disastrous. Van Buren was the president. He was the political heir of General Jackson, and owed his election largely to the influence of the latter. Accordingly he shared General Jackson's antagonism to a United States Bank, and was averse to chartering a third bank, and yet there was no means available for the safe keeping of the government funds or the establishment of a stable and uniform currency except for the government to undertake the matter itself. After several years of weary dissensions and wrangling in which the great leaders, Webster, Clay, Calhoun and others, participated, in speeches of the power and brilliancy which usually characterized these eminent orators, the independent treasury, sometimes called the sub-treasury system, was worked out, and in August, 1846, became a law. Thus was begun the policy of the independence of the government from the banking system of the country. The

**Establishment
of the Independ-
ent Treasury
System**

"divorce of bank and state" advocated by Jackson and urged by Van Buren had become a fact under Polk. Whatever objection there may be to the independent treasury system at the present time, its establishment in 1846 was probably the best way out of a difficult and perplexing situation.

The law begins by defining the treasury as follows: "The rooms prepared and provided in the new treasury building, at the seat of government, for the use of the Treasurer of the United States and his assistants and clerks, and occupied by them, and also the fire-proof vaults and safes erected in said rooms for the keeping of the public moneys in the possession and under the immediate control of said treasurer, and such other apartments as are provided for in this act as places of deposit of the public money, are hereby constituted, and declared to be, the treasury of the United States." Branches or sub-treasuries were provided for in the law, to be established in New York, Philadelphia, Boston, New Orleans, Charleston and St. Louis, each under the immediate direction of an assistant treasurer. The places selected for the location of sub-treasuries were cities in which the government was presumed to have extensive transactions, either as ports of foreign commerce, or, as in the case of St. Louis, a convenient point for the sale of the vast domain of government lands. These were the cities in which the government deposits had been kept, principally, in the state banks.

The Independent Treasury Act further provided "That the treasurer of the United States, the treasurer of the mint of the United States, the treasurers and those acting as such of the various branch mints, all collectors of the customs, all surveyors of the customs acting also as collectors, all assistant treasurers, all receivers of public moneys at the several land offices, all postmasters, and all public officers of whatsoever character be and they are hereby required to keep safely, without loaning, using, depositing in banks, or

**Provisions
of the Act**

exchanging for other funds than as allowed by this act, all the public money collected by them, or otherwise at any time placed in their possession or custody." Thus the purpose of the act clearly was a complete separation of the government finances from the banking system of the country. Even though the sub-treasurers and collectors in various parts of the country may not at first have been provided with suitable vaults or safes for the safe keeping of the public money, nevertheless they were expressly prohibited from depositing in the banks. Taken in connection with the law authorizing the emission of treasury notes* as currency, the independent treasury and its branches became in effect a gigantic bank.

One of the most important features of the Independent Treasury Act was the special clause which required all payments of public dues and also all disbursements to be made in gold or silver coin or treasury notes, and all exchanges of funds to be made upon a gold and silver basis. This clause placed the country on a specie basis, and kept up a specie circulation which gave a sound basis to the whole country. All customs, the proceeds of the sale of public lands and other public dues were paid in gold, silver or treasury notes, and all disbursements for salaries of government officials, public improvements and expenses of the Mexican War were paid in the same. The Independent Treasury system had a beneficial effect by restraining the issues of state bank currency. Considerable difficulty was experienced in transferring funds from one depository or sub-treasury to another without the aid of the banks, necessitating the movement of the actual money in many instances, involving both expense and risk, but a system of drafts was adopted that worked well.

Specie Clause

*Treasury notes were first issued during the years 1812-13-14-15 as a means of carrying on the war against England. They were again issued during the panic period, 1837-1843, and again during the Mexican War, 1846-1847. They were usually in denominations of \$100, payable to order, and bore interest.

The Independent Treasury system seemed to meet every requirement. The Mexican War had been financed successfully by the government issuing \$20,000,000 of interest-bearing treasury notes at par and contracting a \$28,000,000 loan, its bonds commanding a premium. Business was good. Foreign commerce had increased and the fiscal machinery of the new system seemed to do its work with little friction. In his report of December, 1856, the Secretary of the Treasury declared "that the independent treasury, when over trading takes place, gradually fills its vaults, withdraws the deposits, and, pressing the banks, the merchants and the dealers, exercises that temperate and timely control which serves to secure the fortunes of individuals and preserve the general prosperity." He thus believed that the Independent Treasury would act as a check on over trading and a balance wheel to our commercial prosperity—a prediction which has not been altogether verified by time and experience.

The great crisis in our history, which occurred in 1861, changed the executive officers of the government and placed at the helm a class of men who were the political descendants of the old Whig party, of which Webster and Clay were leaders. Lincoln and Chase were not so particular to maintain the complete separation of the Treasury from the banking system, and as the exigencies of a great war confronted them, they turned at once to the banks for loans. Between the panic of 1857 and the outbreak of the war the country had been prosperous, and the banks had accumulated a strong specie reserve, while the expenditures of the government during this time had exceeded the revenues and left the treasury empty, the deficit having been met by bond issues amounting to \$90,000,000. The government needed gold and the banks had large quantities of it. Accordingly Secretary Chase in July, 1861, applied to the banks for a loan of \$50,000,000. This was the first friendly act or overture made to the banks since the "divorce of bank and state" in 1846. It was the first

step away from the principle on which the Independent Treasury was founded—the complete separation of the Treasury from the banking system of the country. Between August 19 and November 19, 1861, Secretary Chase borrowed over \$140,000,000 from the banks.

Loaning their gold reserve to the government, the banks were unable to redeem their notes, and in December, 1861, were forced to suspend specie payment. Being sorely pressed for funds with which to carry on the war, the government had issued large volumes of “greenbacks,” which by a legal provision were forced upon creditors. Not having a reserve sufficient to support its paper circulation, on January 6, 1862, the government also suspended specie payments. Thus the “specie clause,” one of the most pronounced features of the Independent Treasury Act, was made of no effect.

Next came the National Banking Act, by which the banking system of the country was linked to the Treasury Department, to be controlled by it. Banks were made depositories of public funds and authorized to act as financial agents of the government in receiving subscriptions to government loans and the collection of internal revenue taxes. So close was now the relation between the banks and the treasury that the law of 1846 had become practically a dead letter, and the very purposes for which the independent treasury system was established—separation from the banks and the maintenance of specie payments—were both abandoned owing to the stress of circumstances. By the same act which formed the national banks the state bank currency was driven out of circulation and the issues of the national bank notes were regulated and controlled by the treasury. These banks aided the Treasury in placing and carrying the immense loans necessary to maintain the armies and fleets in active service for four years. It would indeed have been very difficult if not impossible for the government to carry the war through to its close without the aid and co-operation of the banks.

The close connection between the Treasury and the banks, brought about by the exigencies of a great war, have continued to the present time, and even grown stronger and more intimate as the financial operations of the government have expanded in recent years. In 1879 the sub-treasury at New York became a member of the bank clearing house. This connection with the

**The Treasury
Since the War**

banks proved to be very important and valuable to the government just prior to and during the period of the resumption of specie payment, in 1879, for it relieved the sub-treasury of the necessity of making coin payments to any large extent, since the clearing house agreed to accept legal tender notes in payment of all balances due from the government to the associated banks. Indeed, if the Treasury had attempted the resumption of specie payments at that time without the aid and co-operation of the banks, it is almost certain that the attempt would have proven a failure because the banks held the chief supply of gold. Since the resumption of specie payments the policy of the government with reference to the Treasury has remained practically unchanged to the present time. Upon the Treasury depends the stability of our entire financial system, and upon this largely depends the prosperity of the nation.

Having now sketched briefly the history of the Independent Treasury system, we shall proceed to examine into its character and organization. The Treasury is the agency whereby the financial operations of the government are carried on. It is the means by which a uniform standard of value is given to our currency, a system of coinage is maintained, our banking system

**Organization of
the Treasury**

is controlled, and the revenues of the government are collected and disbursed. The Independent Treasury consists of the Treasury Department at Washington and nine sub-treasuries, located in Baltimore, Boston, Chicago, Cincinnati, New Orleans, New York, Philadelphia, San Francisco and St. Louis. In addition to these the govern-

ment has established at various places, where there are no sub-treasuries, depositories for the receipt and payment of government funds.

The United States Treasury holds a reserve of \$150,000,000 gold for the purpose of maintaining the credit of the government and establishing confidence in its ability to redeem its paper currency in specie on demand. This reserve supports obligations equal to nearly ten times its amount, so great is the faith of the people in the ability and integrity of the government. The outstanding obligations of the government, which rest in whole or in part upon this reserve, and are kept on a par with gold by it, amounted on December 1, 1907, to \$1,692,027,422, as follows:

United States notes (greenbacks)	\$344,682,957
National bank notes	648,895,117
Silver coin (standard silver dollars)	90,979,549
Silver coin (subsidiary)	132,979,612
Silver certificates	468,953,120
Treasury notes of 1890	5,537,067

Not only are all forms of money in the United States maintained upon a uniform gold basis and made interchangeable by the redemption system of the government, thus causing \$1,692,027,422 in credit money to circulate as the equivalent of gold, but the Treasury is constantly redeeming the currency presented to it, and issuing new bills instead, thus freeing the paper circulation from old and tattered bills. The government also receives deposits of gold coin or bullion and issues certificates against these in equal amount. Of these there were outstanding on July 1, 1901, \$675,636,209, representing that amount of gold in the vaults of the Treasury.

The business of the nine sub-treasuries consists in receiving deposits from collectors of customs in the ports of entry, internal revenue officers, national banks for their annual tax, postmasters for account of the post office department, also patent

fees, deposits for transfer to other points by banks or other corporations and individuals. The payments consist of pensions to soldiers and their widows, and the warrants or checks of disbursing officers such as paymasters, quartermasters and others.

**Business of the
Sub-Treasuries**

All mutilated currency such as United States notes or bank bills that have become unfit for circulation, are replaced at the sub-treasury free of charge. United States notes are redeemed in gold, and one kind of money is exchanged for another. Gold certificates are issued for deposits of not less than twenty dollars of gold coin. Silver certificates are issued for silver dollars, and vice versa. Thus the sub-treasury is a money-receiving, money-paying and money-exchanging establishment. Its accounts are balanced at the close of each day and a summarized statement of the day's business is forwarded to Washington.

Some of our ablest financiers and students of the subject are now criticising and condemning the Independent Treasury system, on the ground that it interferes with the normal operation of the business interests of the country. The principal objection lies in the fact that it locks up in the sub-treasuries large volumes of money in the form of customs at certain times or seasons, thus contracting the money in circulation, when the business interests of the country may require all the circulating medium. Prof. David Kinley, in criticising the system, says: "The action of the Independent Treasury is such as to vary the amount of money in circulation. At one time it absorbs, at another disburses, considerable sums. There is nothing in the nature of the sub-treasury that makes its receipts and payments necessarily concomitant with a free and stringent condition of the money market respectively." Its action is independent of the money market. Were it possible that the Independent Treasury could absorb and withhold funds when not needed in business channels, and disburse it freely when business interests required a larger circulating medium, it would afford elasticity

to the currency and prove a great benefit, but unfortunately it is liable to act in exactly the opposite direction, and thus aggravate the money stringency. Then the Secretary of the Treasury must needs go outside of the law and use his prerogatives to assist the financial interests of the country by the purchase of bonds so as to release some portion of the money in the Treasury for general circulation and use.

By withholding money from circulation as the Treasury does at times, the effect is to lower prices of commodities generally, and at other times large disbursements by the Treasury tend to raise prices by making money more plentiful, thus in both instances unsettling values, to a slight extent. The remedy advocated is to abolish the sub-treasuries and deposit the government funds with the national banks, where it can be used in the channels of trade and commerce.

BANK CLEARING HOUSE.

CHAPTER XXVII.

SETTLEMENTS BETWEEN BANKS.

HISTORY; OBJECT; METHODS; CLEARING HOUSE CERTIFICATES.

The original idea of a clearing house was an institution designed to facilitate the settlement of daily balances due to and from a number of banks. It is thus a labor saving device, arising from the payment of checks on each other, and the transaction of other business. It would be almost, if not quite, impossible to transact the volume of business which daily passes through our banks were it not for this ingenious institution. In the New York clearing house alone the daily clearings frequently run above \$300,000,000, and this vast volume of business is settled by the payment of about five per cent. of actual money as balances. The scheme of the clearing house is merely to offset one debit against another credit. Were there but one bank in New York, no clearing house would be necessary, since the debits and credits would be offset against each other on the books of the bank and one indebtedness would cancel another, to a large extent, but where there are numerous banks and vast numbers of checks to be settled, the clearing house effects an enormous saving by bringing them together. The clearing house with its gigantic operations cancels obligations arising between banks, the same as the banks do for the individuals composing a business community.

The use of checks and drafts in the transaction of business has grown in this country to a very wide limit, much in excess

of their use in any other country, and as the United States becomes older and better banking facilities are provided, people are gradually educated to the use of commercial paper, and the volume of actual money—coin or paper currency—as compared to the volume of business transacted, grows proportionately less. The increase in the use of checks and drafts has more than kept pace with the increase in the volume of business of the country, hence the volume of actual cash in circulation has grown proportionately smaller. Again the proportion of checks and drafts to money is less in the parts of the country distant from the money centers and in small towns where banks are scarce. Such communities need more money in proportion to the volume of business done, and must have the ready cash in hand to cover the numerous small transactions occurring. But in the large cities and great money centers of the country substitutes for money in the form of commercial paper are more extensively used, and the transfer of credits upon the books of the banks constitutes the method of payment in a large proportion of instances. The clearing house encourages and facilitates the use of substitutes for money by furnishing a safer and more convenient method for settling exchanges between banks.

The first clearing house was organized in London about 1775, and for three-quarters of a century it and the one established in Edinburgh soon after remained the only organizations of the kind. Prior to the establishment of the London clearing house the Bank of England served as a means of making settlements, and besides the people were not accustomed to the use of bank checks in making payments, as at the present time. The New York clearing house was established in 1853, Boston in 1856, Philadelphia in 1858, and Chicago in 1865. The clearing house is therefore a comparatively recent institution. Every considerable city where banks are numerous now has its clearing house, and the total

Use of Checks
and Drafts

History

annual clearings of the United States mount up to fabulous figures.

A room of suitable size to accommodate the volume of business, quiet and centrally located, is the first consideration. The furniture consists usually of a counter or desks over which the settlements are to be made. Each bank, member of the association, sends to the clearing room at the precise hour appointed two clerks, one of whom holds the exchanges of the previous day, including also items received in the morning's mail. These are all listed and those against each bank kept separate. At the tap of the manager's bell a clerk from each bank takes his position behind the counter and opposite him his companion from the same bank. A given signal and all of the clerks outside the counter move forward to a point opposite the next clerk, pass the exchanges belonging to the bank represented by that clerk over the counter, take a receipt for them, and then with a concerted movement all pass to the next. When the clerks on the outer side of the counter have made their rounds and delivered their exchanges they return to their several banks, carrying with them the checks received from other banks, while the settling clerks remain to cast up the columns and ascertain whether their several banks are debtor or creditor, whether they are to receive or must pay a balance into the clearing house. As each clerk completes his calculations he reports the result to the manager, and when all have finished, and the totals agree, the clerks are dismissed.

The total of the debits against the debtor banks must equal the total of the credits in favor of the creditor banks, on the theory that every debit has a corresponding credit. A bank cannot know until its settling clerk returns whether it has a balance in its favor or is owing the clearing house and how much. It may be a creditor one day and a debtor the next. Its officials naturally hope for a favorable balance, for that indicates a temporary increase in its line of deposits. But if the balance is

**Method of
Clearing**

against the bank it must be prepared to meet it promptly at the appointed hour. The payment of balances by the debtor banks takes place at perhaps an hour after the exchanges have been made, a receipt being taken in every case in the regular way. Messengers from the creditor banks call later to receive the balances due their banks. The kind of money used in the payment of these balances is regulated by the rules of the associations, but is usually gold coin and currency. Silver is permitted in restricted quantities in some associations, but owing to its bulk it is not well suited to large payments. The rules of some associations require the money paid in to be assorted and put up in packages of \$5,000, on which is marked the number of the bank, as a guarantee of the correctness of the count.

Settlement of Balances The management of a clearing house association is usually vested in a board of officers consisting of a president, vice president, secretary, treasurer, manager and a clearing house committee. In small cities this list of officers is sometimes curtailed by omitting the office of vice president and secretary and combining the duties of the latter with those of manager. The duties of the officers are such as usually appertain to similar offices in corporations, with the exception of the manager, who has charge of the clearings and is the principal executive officer of the association. The clearing house committee is usually composed of three of the most capable bankers in the association, elected annually by the members. This committee has almost absolute authority, being in effect a board of directors. It decides upon the admission of new members, suspension of members when expedient, makes rules for the management of the association, and in general directs its business.

Management While the first and primary object of a clearing house is the settlement of exchanges between banks, its functions are not confined to this. By association many benefits have been derived

by the banks not contemplated in the original intent, and the tendency has been, in recent years, to include in the scope of the clearing houses many questions of policy and practice affecting the banks and the business community. The most important functions of the clearing house, beyond that of effecting exchanges, is summed up by Cannon in his "Clearinghouses," as follows: "1. The extending of loans to the government. 2. Mutual assistance of members. 3. Fixing uniform rates on deposits. 4. Fixing uniform rates of exchange and of charges on collections. 5. The issue of clearing house loan certificates." In case a member is found to be in financial straits owing to a panic or false rumor, causing a run of depositors, and is unable to convert its assets into cash with sufficient rapidity to meet its demands, the clearing house committee will examine into its condition, and if its assets are found to be ample and good, and its management not seriously defective, it will extend temporary aid until the strain is relaxed. If the member, however, is addicted to objectionable methods in management the committee will not go far out of its way to lend saving help, preferring to get rid in this way of a weak and ill managed member.

By fixing the rates of interest on deposits, rates for collection and exchange, etc., the committee takes away the incentive of banks to compete against each other in these particulars—a practice which might lead to improper and unsafe banking. Rate cutting is especially objectionable in the banking business.

But probably the most important function exercised by the clearing house is the issuance of loan certificates. These are given for temporary loans, usually consisting of good assets, made by members to the association and are receivable for balances due to other members. The first certificates were issued by the New York clearing house at the opening of the Civil War, and were necessitated by the general decline and shrinkage in bank deposits and loans

Clearing House
Certificates

consequent upon the uncertainty attending the election of Lincoln to the presidency. The New York clearing house met and passed the following resolution:

“In order to enable the banks of the city of New York to expand their loans and discounts, and also for the purpose of facilitating the settlement of exchanges between banks, it is proposed that any bank in the Clearing House Association may, at its option, deposit with a committee of five persons—to be appointed for that purpose—an amount of its bills receivable, United States stocks, treasury notes or stocks of the State of New York, to be approved by said committee, who shall be authorized to issue thereon to the said depositing bank certificates of deposit bearing interest at seven per cent. per annum, in denominations of \$5,000 and \$10,000 each as may be desired, to an amount equal to seventy-five per cent. of such deposits. These certificates may be used in the settlement of balances at the clearing house for a period of thirty days from the date thereof, and they shall be received by creditor banks during that period, daily, in the same proportion as they bear to the aggregate amount of the debtor balances paid at the clearing house. The interest which may accrue upon these certificates shall, at the expiration of thirty days, be apportioned among the banks which shall have held them during the time.”

Several times during the Civil War the New York clearing house resorted to the use of certificates as a means of relieving the financial stringency, and the effect in each case was decidedly beneficial. Banks were thus enabled to discount commercial paper and make loans to relieve business firms which were perfectly safe and solvent, but in distress, and the business situation at once felt the brightening effects of the policy. Clearing house certificates to the extent of \$22,000,000 were in circulation among the banks of New York in 1862, and this was equivalent to a vast increase in the volume of money in circulation. Again during the panic of 1873 the same course was pursued and about \$26,-

000,000 in certificates were issued by the New York clearing house. Other cities seeing the benefits of the system, adopted it, and issued certificates for temporary relief, thus greatly relieving the severity of the memorable panic of 1873, which extended over the entire country and resulted in severe hardships.

In 1893 a panic of unusual severity spread over the United States. Banks were forced to close and business houses were pushed to the wall. Under the restrictions of the national banking law it was impossible to secure relief by an increase in national

bank notes in time to save the people from the disasters which follow in the wake of a financial storm.

Panic of 1893

Banks in the small cities and towns drew heavily against their deposits in the large cities and money centers, especially New York, and it became necessary for the financial institutions, chiefly in New York, to find a means of staying the force of the panic. The most potent factor in this relief was the clearing house certificates issued by the associations of New York and other cities. Forty-one million dollars of these certificates were issued by the clearing house committee, based upon the deposits of securities by various banks of New York. Other cities pursued the same plan, and the amount of bank money was thereby suddenly increased throughout the country to the extent of perhaps \$150,000,000, greatly to the relief of business interests generally.

In October, 1907, an attempted corner of the copper market precipitated a panic in New York City which spread to other parts of the country. The public began to withdraw deposits

and weak banks were forced to close. The underlying cause of this panic was over-extension of credit and the lack of sufficient currency for the

Panic of 1907

requirements of business at the crop moving season. The situation was relieved by the importation of gold from abroad, heavy depositing in the banks by the government, and the use of Clearing House certificates.

What is and what is not proper matter for clearing depends

upon the rules of each particular association, and these are by no means uniform on this point. The following paragraph appears in the rules of a western clearing house: "Proper matter for clearing shall consist of checks, drafts, manager's certificates, certificates of deposit, either demand or m-

Matter for Clearing tured, and any other matter specially agreed upon, until notice is given to the contrary, and any bank clearing paper not proper shall be fined." In some associations notes and drafts are not sent through the clearings, while in others they may be cleared. The general rule seems to be that only such items as upon their face are unconditional demands upon a bank, for payment, are proper material for clearing. Some associations keep near this rule, while others seem to broaden it to the full limit of expediency.

The clearing house associations in a number of the large cities have enacted rules forbidding matter to be cleared which bears a restrictive endorsement. It was formerly the custom for depositors to endorse "For Deposit," "For Account of," "For Collection," etc., above the name of the depositor,

Restrictive Endorsements thus intending to transfer possession but not title to the paper. This is now forbidden, as a measure of self-protection, by many large associations, unless the clearing bank specially guarantees the paper. Paper then to pass through the clearing house should be endorsed either in blank or full, as "Pay or order." Before sending its exchanges to the clearing house, each bank stamps a receipt upon the back of each item, with its number, and the words, "Received payment through the clearing house." or otherwise, as the rules of the association prescribe. This indorsement though made unofficially and by means of a rubber stamp, is regarded as authentic, and guarantees all previous indorsements. After the clearings are made, items which are not honored by the bank on which they are drawn are returned by messenger and "bought back" by the bank through which they were cleared.

Banks and trust companies not members of the clearing house association may clear through a member-bank, but the latter is liable to the association for such exchanges the same as for its own, and they usually exact proper security as well as compensation from the bank or trust company for performing the service. In Boston the clearing house association has put in operation a system for collecting checks on out-of-town banks which is certainly a material saving in expense as well as labor. Instead of each bank collecting its out-of-town checks, these are all sent to the clearing house at a fixed hour daily and there assorted by towns and banks. All of the checks on each country bank are then listed and forwarded to that bank in one package. This is a decided advantage also to the country bank, since payment can be made to the Boston clearing house for all of these checks at one time, instead of having to remit to several different banks. The remittances are then put through the regular clearings by the manager of the clearing house very much the same as other items.

**Non-members
and Country
Checks**

No doubt the clearing house, which was originally intended merely as a labor and time saving device, and which has since developed into an important factor in our financial system, assuming new functions from time to time, will further expand and add to the efficiency of the financial machinery of our country. In his valuable treatise on clearing houses, Mr. James G. Cannon, president of the Fourth National Bank of New York, says: "Clearing houses are gradually becoming a welding force that ultimately will bring to the banking business of this country the centralization which it so greatly needs. In the course of time rates for money in the United States will become more and more on a par with those prevailing in European money centers, and then the clearing houses of the various financial centers of this country will be obliged to undertake functions which as yet they have only discussed."

**Clearing-
houses of the
Future**

BORROWING AND LENDING MONEY.

CHAPTER XXVIII.

THE USE OF CREDIT.

THE MONEY MARKET; CALL LOANS; COLLATERALS; NOTE BROKERS.

Business men must borrow money. With rare exceptions every firm and corporation in the regular course of business must at times resort to the money lender. Credit lies at the foundation of our financial and commercial systems, and it is prudent business policy to use credit within proper limits. When a firm can earn more than the ruling rate of interest upon capital employed, after safely making allowance for all expenses and hazards, it may prudently use borrowed money as a part of its working capital. Suppose a firm with \$100,000 capital turns its capital over six times a year and makes a net profit of $2\frac{1}{2}$ per cent. each time. Its yearly profits then would be \$15,000. If now it can extend its business in the same proportion it can afford to borrow, say \$50,000 at 6 per cent. interest to increase its working capital. Its profits would then amount to \$22,500, from which deduct \$3,000 interest, and we have a net profit of \$19,500, or nearly 20 per cent. upon the capital of the firm.

The constant general tendency of prices of merchandise is downward. Competition tends to reduce prices and lessen profits.

**Necessity for
Borrowing** To offset these diminishing profits, firms aim to do a larger volume of business and make the expense proportionately less. This requires greater capital to introduce improved machinery, put more salesmen on the road, or otherwise improve the facilities of the house,

and acts as an incentive to the firm to resort to the money lender.

As a country grows older and the surplus earnings of the people are carried over from year to year, there is an increased amount of money seeking borrowers, and competition of money against money tends to reduce the rate of interest, thus enabling borrowers to meet the falling market prices of their wares and yet pay the ruling rate of interest for borrowed capital. The machinery for massing capital, such as the savings

Lenders banks which gather up the little rivulets of wealth, trust companies, insurance companies and banks, becomes more numerous and efficient and the knowledge of the conditions of financial safety in business, such as reports on the credit of firms and corporations, also becomes more thorough and reliable, so that the whole process of borrowing and lending in business is facilitated and made less hazardous. To take advantage of these trade forces and use them properly is the province of the financier.

The inexorable law of supply and demand obtains in the money market the same as in other things. Money is a commodity, and at times it is in greater demand than at others, the same as other commodities. Supply and demand, as they affect the money centers, affect the entire money market to a greater or less degree. Thus a "tightness" of money in Wall Street, or an unusual demand for money there, causes a rise in the rate of interest, and money at once flows to New York, perhaps causing a rise in the rate of interest through the country. In the agricultural districts of the West,

**The Money
Market**

when the great crops of corn and wheat must be carried to market in the autumn, a large amount of money is needed, and the banks aim to so time their loans as to have a good supply on hand at that time. In the sugar and cotton districts of the South the crops are ready for market in December and January, and these make a profitable demand for money.

In the states where wool is extensively raised, the time of the wool clip in the spring brings need for an increased volume of money, and thus the law of demand and supply affects the money market and regulates the rate of interest, the same as it affects other commodities.

The largest borrowers of money are the great corporations and syndicates which aim to secure in this way a portion of the capital which they require at a low rate of interest and use it at a profit to themselves. Instead of issuing commercial paper, as in the case of firms, their borrowings are evidenced by bonds secured by a mortgage upon the property of the company. These bonds are sold to the public generally in large or small quantities. A company earning six per cent. on its stock could sell bonds to the amount of half its capital on a basis of five per cent. interest, and thus on the same earnings, pay seven per cent. dividends on its capital stock. This is a legitimate proceeding and affords a gain which the officers of any corporation may rightfully take advantage of. While the bonds of large corporations are sold to the public generally, those of small corporations seldom reach the public. Such companies borrow from the banks chiefly, like firms and individuals, and owing to the limited liability of the stockholders for the debts of the company, the banks frequently require in addition to the obligation of the corporation a personal guaranty from the officers. This gives the bank a claim not only against the assets of the company in case the loan is not paid, but also against the officers personally.

The precise limit up to which a corporation or firm may properly borrow is hard to define. It is very close to that point at which its paper floats at par drawing ordinary interest. When a concern must sell its paper at a heavy discount, it is evidence that it is over borrowing. In order to hold its bonds at par companies sometimes offer a higher rate of interest than the usual rate. But this is a

Corporations

**Limit of
Borrowing**

public confession of the weakness of the paper. Occasionally a corporation will issue bonds bearing a low rate of interest and sell them below par. This is questionable financiering, since the face value of the bonds must be paid at maturity. Thus a corporation desiring to raise \$1,000,000 issues bonds bearing 4 per cent. and sells them at 80. In order to realize the amount of cash needed, viz., \$1,000,000, it must issue \$1,250,000 of bonds, and at maturity these must be paid. This is equivalent to paying a bonus of \$250,000 on the sale of its bonds. It is an example of that human tendency to postpone troubles, or relieve the present by borrowing from the future. We may therefore conclude that to issue bonds or other obligations at too high a rate of interest, or sell them at a discount, is a violation of the rules of good financiering and indicates over borrowing. With individuals or firms it may be said that a concern should not, under ordinary conditions, borrow more than half its net worth.

The great money lenders are, of course, the banks. Borrowers are a necessity to a bank, and it will loan to responsible borrowers to any reasonable and proper limit. Bank loans are made chiefly by discounting paper for depositors. Notes and acceptances running ninety days or less, given for the sale of merchandise, and hence representing the value of goods or other property bought or sold, is a desirable class of paper for discount. The value is behind such paper, and it may be said to represent the property. A customer of a bank need not hesitate to offer for discount any paper of this class which is, in his opinion, good, but on the other hand he should not be offended if his banker refuses to discount the paper, even without giving reasons. The banker may be in possession of information concerning the other parties to the paper which the holder is not, and yet cannot disclose that information. Every customer of a bank who keeps an account of any consequence is considered as entitled to a "line of dis-

Desirable
Paper for
Bank Discount

count" in proportion to his usual balance in the bank and financial standing in general. The limit of this "line" is agreed upon with the bank officials from time to time, and the customer sends in for discount such notes and drafts as he may have which he regards as good up to the limit of his "line."

Banks aim to have diversified borrowers. By this is meant those in various lines of business, whose needs come at different times of the year. If the bank had all one class of borrowers they would all want their money at the same time; also at that time draw down their deposits, and the bank would find itself without the necessary funds to advance. In order that the bank may at all times be ready to meet the demands of its customers, it aims to have a volume of money loaned to persons having

no "line of credit" and whom the bank can ask

Call Loans

to retire their indebtedness on short notice. In

large cities some banks have from 25 to 50 per cent. of their loans made to borrowers who do not deposit with the bank, and to whom the bank is under no obligations to extend the loan for any definite period of time. Such loans are made to stock brokers, and are usually payable on demand.

If a business man borrows of a bank a sum of money on his note, and gives as security a pledge in the form of other notes, shares of stocks or bonds, such pledge is called "collateral." The collateral does not become the property of the bank, and the bank is responsible for its safe keeping and return to the owner. Loans on collateral are usually evidenced by notes in which a clause is inserted giving the bank the right, in case there is

Loans on Collateral

default in the payment of the note, to sell the collateral and apply the proceeds of such sale to the liquidation of the note, the residue, if any, to

be returned to the owner or debtor. The trend of the times is for banks to loan on collaterals and less on the individual notes of borrowers, but there are cases where collaterals cannot be readily furnished. The merchant has a stock of goods upon his shelves

but this cannot be placed in the vaults of banks, like stocks or bonds. But merchants and others who borrow on individual notes are required from time to time to furnish their banks with statements of their financial condition, drawn from their books. The experienced banker is not only able to read and interpret this statement, but reads between the lines the future of the business, and advances credit accordingly. In case interest coupons attached to collaterals mature while in possession of the bank the owner is usually allowed to collect or cash them. Collaterals as security depend upon their character. The highest quality of collaterals is United States bonds, and from this their value descends to almost nothing. Banks aim to leave a liberal margin below the market value of any collateral, so as to realize the amount of their loan in case of forced sale. Many classes of collaterals are shifting in value and of varying degrees of security. The banks will exercise care to see that the party is not borrowing too much, and that the bank is not getting a large part of its assets tied up in one class of securities.

It is a good rule that all firms should be out of debt at least once a year, and better, twice yearly; otherwise the banker, through his loans, supplies in fact a part of the capital to the concern, becoming a silent partner with no share in the profits, and every chance to make a loss. This does not apply to stock brokers, who borrow entirely on collaterals, and who use their money to carry their customers. They are constantly in the market for loans, which they secure for their patrons, enabling them to buy and sell various stocks and bonds in which they expect to realize a profit. Occasionally in New York, Chicago and other large cities speculation runs very high, and many men having good business become interested in the stock market, and unbeknown to their bankers and friends carry stocks on a margin with some broker, who is perchance borrowing the money for him at the broker's bank. Such practices on the part of business men,

Loans for
Speculative
Purposes

if discovered, will seriously injure their credit, and bankers are ever on the alert to discover a customer who is speculating, and to discountenance the operation.

When property is on its way to market with a certainty or probability of early sale, it is a legitimate object on which banks loan as collateral. In fact one of the chief functions of a bank is to bridge over the period of time between production and consumption. When merchandise is shipped for sale either in the home or foreign market, bills of exchange are drawn upon the consignee, and if accompanied by a specific pledge of the property in the form of a bill of lading, are called "documentary bills." A very large part of the grain, live stock and cotton of the country is carried to market in this manner. The property is protected by insurance in favor of "whom it may concern," and the bank, by holding possession of the documents, holds title to the property until the draft is paid.

Another form of collateral used extensively in business as security for bank loans is warehouse receipts. Produce or other property may be withheld from market for a better price, and while being so held it is placed in a warehouse and the regular form of warehouse receipt taken for it. This receipt then may be used as collateral to a note for discount at bank.

It represents the property and carries constructive possession of the property with it. No one can withdraw the produce or other property from the warehouse without showing the receipt properly endorsed. Loans on this class of collaterals are not, however, regarded with much favor by banks, since the time which the property is to be held in store is indefinite, and the market value is uncertain, making the loan indefinite as to time of payment, and the security liable to fluctuation. Loans of this character are accommodation loans and often have to be inconveniently prolonged.

Accommodation paper consists of notes or drafts made or

signed for the express purpose of securing a loan, and do not represent a bona fide business transaction. Sometimes the accommodation consists only of an endorsement upon a note or draft created by the person who desires the accommodation; it may consist of the acceptance of a draft. But whatever form accommodation paper

Accommodation Paper

may assume, banks and money lenders do not regard it favorably. It is not regarded as legitimate business paper like the draft or note executed on the basis of a sale of goods. Accommodation paper can be collected legally, for the law protects the bank or any other innocent third party who takes the paper in the ordinary course of business, without knowing its want of consideration between the original parties, and the obligator to such paper must pay. This protection of third parties to commercial paper is a necessary safeguard to enable it to be readily sold and transferred. Accommodation notes and accommodation endorsements are not as common in this generation as in the past. Many an old man plods along to-day, poor, but wiser for his experience in endorsing paper for a friend, perhaps many years ago. That one fatal act reduced him to penury, from which he was never able to recover. Business men of to-day have learned to conduct transactions upon safer and better methods, perhaps owing to the experience and good advice of their fathers.

A class of dealers in commercial paper called note brokers handle considerable paper of merchants and manufacturers, and re-discount with the banks. The note broker is a convenience to both the merchant and bank—to the former by buying his paper and thus furnishing him with funds which he may need in his business—to the bank by selling paper to it whereby it is enabled to employ its capital profitably when there is a lack of applications for discounts from its regular customers. Merchants can afford to sell their paper at 6 per cent. interest to a note broker, and discount their own bills at 1 per cent. per month, or better. The question

Note Brokers

arises at once, why does not the merchant sell his paper to his bank directly, instead of selling it in the "street," and will not his banker grant the merchant all the credit he is really entitled to, and discount all of the paper his capital and financial standing will justify him in uttering? It may not. The bank may have its funds loaned out up to the limit and be practically unable to buy the merchant's paper, even if desirable, while some other bank might be short of good paper. The note broker, as a sort of go-between, can sell the paper wherever there is a demand for it. He may sell it in another town or city where there is a surplus of deposits and a dearth of loans. In some localities the banking capital is much larger than can be profitably employed in the immediate vicinity, and consequently those banks invest large sums through note brokers.

Then again a bank may contract its loans at any time by selling notes previously purchased from a note broker. Such notes are usually made payable to the order of the firm or individual signing them and then endorsed in blank. To sell this paper does not require the bank's endorsement, and it can be sold again through the same class of brokers as purchased from. When a bank makes a loan to one of its depositors, the note is usually made payable to the order of the bank, and it is not customary, except in cases of great need on the part of the bank, to have this paper go out of its possession. Business men who borrow of a bank do not ordinarily wish the bank to let the paper go out of its possession.

The making and selling of one's paper in the market, outside of one's bank, and free from the wholesome restraint which a bank exercises upon the inclination of a class of depositors to borrow beyond their proper limit, is a method of business which is fraught with danger and liable to abuses. In prosperous times it is apt to lead to over trading or to speculation. Funds obtained in this way can be used for any purpose, and are often applied to other uses than the discounting of merchandise bills.

**Dangers of
the System**

As a rule note brokers merely transfer the paper without guaranteeing its payment by endorsement. While the broker is not legally liable in case the maker fails to pay, yet his business success depends upon the manner in which the notes are paid, and he is, therefore, exceedingly anxious that they should be paid promptly at maturity. He is considered a guarantor that the notes are all right in every respect, except as to whether they will be paid or not, and of that the bank or buyer is presumed to be equally capable of judging. The note broker must make no misrepresentations in order to sell his paper. His dealings with the buyer of his paper require the utmost good faith on his part. He sends a printed list containing a description of perhaps a hundred notes to the bank. Each note is numbered and if the bank wishes to see any of the paper, it is sent upon application. Or a broker or an agent for him may visit a bank personally and exhibit a list of the notes and acceptances which he wishes to negotiate.

Loans on real estate security are considered a desirable class, where the intention is to put out the money for a long time. The lender usually does not aim to loan a larger amount than one-half or two-thirds the value of the property, leaving a good margin as an inducement to the debtor to repay the loan, rather than default. Loans on real estate are evidenced by a special form of note, and secured by either a mortgage or trust deed. A mortgage is a conveyance of the property to the creditor with the condition that if the debt is paid the conveyance becomes void. It is similar in many respects to a deed, with a conditional clause. A trust deed is a conveyance of the property to some third party called a trustee in trust as security for the debt. When the debt is paid, the trustee executes a release of the conveyance; that is, deeds the property back to the owner. Before loaning money on real estate security, the lender must satisfy himself not only as to the value of the property and its desirability as security for the pro-

**Responsibility
of the
Note Brokers**

**Real Estate
Loans**

posed loan, but he should have the title **examined by a competent attorney**. An abstract of title containing a history of the conveyances through which the title has passed will be furnished by an abstract company.* Having found the title clear and satisfactory and no judgment against the mortgagor, the mortgage or trust deed may be executed and the loan made, but no time must be lost in getting the mortgage on record in the office of the recorder of deeds of the county where the property is situated.† The object of recording is to give notice of the existence of the mortgage to any one who might wish to purchase the property or take a mortgage upon it. There may be several mortgages on the same property, the first being entitled to priority of payment, then the second, and so on. In case the debt is not paid at maturity the holder of the mortgage has a right to foreclose and have the property sold at judicial sale, the residue, if any, after paying the debt, interest and costs, to be returned to the mortgagor. After sale, the mortgagor has a period in which he is allowed to redeem the property (usually about fifteen months) by paying up the debt and all costs, etc., but failing in this the sale becomes absolute. As to the special provisions of the law in regard to mortgages or trust deeds, their foreclosure, etc., the statutes of the state should be consulted. In case the security for a loan consists of both land and buildings it is usual for the mortgagor to have the latter insured for the benefit of the mortgagee.

*We now have title guaranty companies who guarantee or insure the mortgagee against loss by any defect of title in the property. They are a species of insurance company, and their guaranty policies are extensively accepted.

†The best method is to execute the mortgage or trust deed and place it upon record before the abstract of title is brought down to date. Then when the abstract is continued it will contain the mortgage or trust deed and show the continuity of title up to the moment of the loan.

CORPORATIONS.

CHAPTER XXIX.

CHARACTER OF CORPORATIONS.

**FORMATION; PROMOTION; KINDS OF STOCK; WATERING STOCK;
DIVIDENDS.**

A corporation is an artificial person created by law. It is a personage entirely distinct from the individuals who form it or conduct its affairs. Its members may all die and be succeeded by others, but its existence is not affected thereby. It continues on indefinitely or until its charter expires, or is forfeited or surrendered. Corporations are of two kinds, public and private. Public corporations are such as are created for public purposes, viz., cities, towns, libraries, hospitals, etc. Private corporations are such as are conducted for private purposes and for the benefit of those directly connected therewith, as railroad, bank, insurance, manufacturing and mercantile corporations.

Definition In the case of public corporations every citizen is a member of the corporation. In the case of private corporations only those are members who own shares of stock. A close corporation is one with a limited membership, no stock for sale to the public and vacancies filled by selection, the prime object being to keep the profits of the company within a small circle or family and immediate connections. Many of the most profitable business corporations are conducted in this way.

One of the primary reasons why a corporation, rather than a co-partnership, is preferred by those intending to embark in an enterprise is that when the capital stock is paid for by the

stockholders there is no further individual liability for debts and obligations of the corporation, and in case of insolvency and failure of the corporation, their loss is but the amount they have already invested when they subscribe to their shares of stock. If the stock is not fully paid up, the stockholder is liable to creditors and the corporation for the unpaid balance, while in a co-partnership business, conducted by individuals, each individual is personally liable for the entire obligations of the co-partnership of which he is a member.

Another reason for preferring a corporation to a co-partnership is the facility it affords for procuring investments by the public, who, by reason of the segregation of the entire capital into numerous small shares, are enabled to make an investment of such amount as the individuals desire. This method enables organizers and promoters to enlist in their enterprises the capital of a multitude of investors, large and small, which they would be unable to interest without such form of organization.

Corporations are creatures of the state, and are formed either by special charter or compliance with the requirements of a general statute. At the beginning of the century all corporations in this country were formed by special charter, but owing to the corruption and bribery resorted to in order to get charters passed through the legislatures of the several states, containing favorable terms and granting valuable privileges and monopolies, the constitutions of most all of our states have been amended so as to prohibit the legislatures from granting special charters. Many corporations are formed for the purpose of conducting an ordinary business in competition with other houses, as banks, railroads, etc., or for buying out or "taking over" established concerns, while others are formed especially to develop or promote a particular franchise, invention or discovery. In the latter case the value of the shares is largely fictitious, being based upon the estimated future profits of the company. A

Formation
Promotion

large portion of the capital stock goes to the inventor or discoverer or promoter of the enterprise, as payment for his services, and the rest is sold to the public, usually at a very low price at first, and an increasing price as fast as the stock will sell. It is in the formation and promotion of corporations that serious evils and abuses have grown up in this country. Fraudulent prospectuses are issued by skillful "promoters" versed in all the arts by which stock is sold, representing that the enterprise is fully afloat and the stock paid up, when in fact it has been "paid up" only by worthless patents, or property purchased at a gross over-valuation. The number of "bubbles" which are floated every year, and in which the inexperienced and unwary lose their savings, is astounding. In England this evil became so great that in 1867 a law was passed requiring a public registry of all contracts whereby stock was issued by a corporation in payment for any franchise or other property. Investigators claim that over speculation is largely due to the formation of corporations that have no real excuse for existence, except the furtherance of the personal aims of the promoters. The fullest possible publicity concerning the initial acts of every new company is believed to be the only remedy for the existing evils.

It frequently occurs that subscribing stockholders are not required to pay the full amount of their stock upon subscription, or when it is issued, but that the balance that may be due the corporation is subject to the "call" of the directors. The usual penalty imposed upon the stockholders for failure to respond to the "call" is the forfeiture and sale of their stock upon reasonable notice, and the proceeds of such sale are used to pay the obligation contracted by the subscriber. The subscriber is also liable to the corporation for unpaid subscriptions, and failure to respond to the "call" generally renders the subscriber liable to suit for the recovery of the unpaid balance.

**Payment of
Subscriptions**

In corporations conducted for the benefit and profit of mem-

bers, the interest of each is represented by the number of shares of stock which he holds. These shares of stock may be transferred or assigned, and the person to whom they are thus transferred becomes entitled to all rights belonging to the assignor. In case of death of a shareholder his legal representatives succeed to the ownership of the stock. The ordinary stock of a corporation is called common stock to distinguish it from preferred or other kinds.

Each share of stock in a corporation has what is technically termed a par value. This means the value indicated on the face of the stock certificate itself, which usually ranges from \$1 to \$100 per share. A great many mining corporations have stock at a par value of \$1, while manufacturing and mercantile corporations usually have stock at the par value of \$100. Other corporations have stock at the par value of \$5, \$10, \$25 and \$50 a share. The entire issue of stock is universally of the same par

**Par Value and
Market Value**

value. The par value of stock may differ from its market value. The market value of stock is usually ascertained from what the buying public would pay for the stock in open market. Some stocks have a market value much greater, even several times greater, than their par value. This is usually caused by the large earnings of the corporation making the stock a valuable investment, and the demand of investors for stock regularly earning large dividends causes the market value to appreciate. It, of course, naturally follows that there are stocks in many corporations that have no market value, and others whose market value is less than the par value. It is not uncommon that stocks in national banking corporations have a market value largely exceeding the par value, although the dividends are not necessarily larger than stocks of other corporations of a lesser market value; the usual careful management of national banks, coupled with the watchfulness of government officers over their affairs and the laws regulating them, insures to the public, in a very large

measure, the safety of the investment and the stability of the corporation itself, which frequently appreciates the value of the stock of such institutions to a higher market value than stock in other corporations earning much larger dividends.

Preferred stock is that which entitles its owner to profits or dividends in preference to other stockholders. "Guaranteed," "preferential," "preference" and like expressions mean the same.

**Preferred
Stock**

"Interest bearing" stock is a species of preferred stock similar to a bond, since the company has promised to pay interest in the nature of a fixed dividend upon such stock, in preference to the common stock. In case of preferred stock, its dividends are to be paid out of the profits of the company first, and the common stock is then entitled to what remains.

In the cases of certain trading and manufacturing concerns, instead of issuing bonds for borrowed capital, they issue preferred stock, in one or more classes, such as first preferred, second preferred and then common stock. Such stock usually has "cumulative" dividends, which means that a dividend passed at one period must be made up from future earnings before the unpreferred shares receive any portion of the profits.

Such preference stocks are almost the same as bonds, the difference being that they may or may not have preference of claim against the assets of the company in case of failure, depending upon the conditions under which they were issued, and the dividends are not absolutely due and payable, like the interest on a bond. In a year of depression or loss the dividend on preferred stock can be passed, and will cumulate, but in the case of bonds, if the interest is not paid foreclosure may result. Therefore preferred stock is better for the company than bonds, although the holder of the bond may feel more secure on account of the annual payments of interest being obligatory.

Since preferred stockholders have rights superior to common stockholders. in reference to dividends. it is essential that the

creation of preferred stock should be strictly in accordance with the statutes of the state in which the company is organized. If the stock is divided into the two classes before being subscribed, every one subscribing to either class of stock assents to the conditions, but in case a company issues only common stock and afterwards finds itself short of capital to conduct the business, it may then issue preferred stock, as a means of raising funds. This can only be done, however, after a unanimous vote of all the holders of the common stock, properly certified to the Secretary of State and his permission received. The holders of the common stock thus agree to surrender the first earnings of the company to the preferred shareholders with the hope that by means of the additional capital and good management, there may be a profitable remainder left for them.

Many corporations reserve in the hands of the treasurer a quantity of stock to be sold or given away at some future time, as occasion or policy may require, for the promotion of the business. This is called treasury stock, and is the property of the corporation. In case the stock is given away or sold at a discount, however, should the company become insolvent, those holding such stock would be liable to the creditors of the company for the difference

between the amount paid for the stock and its par value, and this notwithstanding the stock should bear the words "paid up stock" or "fully paid and non-assessable." Thus it will be seen that any person who accepts stock as a gift from a corporation for his "influence" or on account of his "standing" in the business community assumes a liability—not to the company if the stock is marked "paid up stock," but to the creditors in case the company fails.

Sometimes the stockholders of a corporation, after complete organization and during its business life, donate by mutual agreement a certain percentage of their stock to be held in the

treasury of the corporation and sold, and the proceeds used in the corporate enterprise. This stock is also called "treasury stock." This plan is often adopted by stockholders of an insolvent corporation or of one whose assets are impaired, and the corporation is by that means made solvent. This plan is resorted to in many instances instead of an increase of capital stock. An increase of capital stock would not benefit the corporation unless the stock were donated to it, and under the circumstances could not be sold as readily as the treasury stock donated in the other method.

Watering stock consists in increasing the amount of stock issued beyond the value of the assets of the corporation. It is an art in which the present generation seems to have become expert, and by means of its clever manipulation great "operations" have been financed, to the enrichment of the manipulators. Suppose a gas company has a franchise to supply the city and public with gas, and charges what is believed to be a fair price therefor. After the company is well "a-going," by means of good management or through the invention of improved processes of manufacture it finds that it is making a very large profit and will be able to declare an exorbitant dividend. Knowing that if the public were aware of its large profits there would be an immediate clamor for a reduction in the price of gas, it sets about increasing its capital stock to two or three times the original amount and distributing it among the stockholders so that the rate of dividend will be reduced to the normal income on capital. Then again a corporation operating under a franchise for a town or city, like a street railway, may have a stipulation in its franchise that all net earnings over a certain percentage shall be paid into the municipal treasury, as a compensation for the use of the franchise. By watering its stock it manages to keep the percentage of earnings below the limit and thus avoids payment of the excess rightfully due to the municipality.

The stock of a corporation is sometimes watered by the officers or a few large stockholders for their own benefit. They represent that it is necessary to largely increase the capital stock of the company in order to enlarge the plant, etc. After the increase has been voted by the stockholders and authorized by the Secretary of State, the few who are manipulating the deal make a loan to the company and take the new stock in abundant quantity as security. Of course there is a default in the payment of the loan when due and the stock becomes the property of the lenders. In the case of many corporations of a speculative character the stock consists largely of water from the first, the actual assets bearing a small proportion to the capitalization of the company. The officers and promoters sell the stock to outsiders until they have secured sufficient money to conduct the enterprise, and retain the balance (usually a large portion) for themselves. This is termed "getting in on the ground floor." Of

**Inducements
to Stock
Watering**

course watering stock is an illegal proceeding, usually engaged in for the purpose of deceiving the public, and may be punished by the revocation of the company's charter. But an increase of the capital stock above the tangible assets to a point which will include the value of the franchise or "good will" is perfectly legitimate, for the latter may be the most valuable asset of the company. Corporations are sometimes inclined to place a very large valuation upon the "good will" or franchise, especially if they are earning large dividends, owing to the prejudice in the public against larger dividends than the usual rate of interest on loans. A firm may earn 10 or 15 per cent. upon its capital and nothing is said or thought of it, but if that firm should organize into a corporation and earn the same profits, it would be severely condemned by public opinion. Public sentiment is therefore a constant pressure upon corporations to drive them to stock watering.

Money earned by a corporation over and above its expenses remains the property of the company until the directors declare

a dividend, when it becomes the property of the individual stockholders. The company may then distribute the entire net earnings as dividends or it may reserve part of the earnings of a prosperous year to make up for possible lack of profits in future years, or it may invest a portion of its net earnings in improvements of the plant and distribute the remainder as dividends.

Again it may, by vote of the stockholders, declare a stock dividend, that is, a dividend payable in stock instead of cash. This is equivalent to an increase of the capital stock of the company and must be certified to the Secretary of State. A stock dividend is perfectly legitimate and proper when the entire net earnings of the business are needed to improve the plant, thereby increasing its value to correspond with the increase of the capital stock.* When stock is sold the dividend goes to the buyer, unless otherwise agreed, and unless the dividend has been declared. If the dividend has been declared it becomes in a sense separated from the stock and is the personal property of the one who owned the stock at the time it was declared.

Fictitious dividends are those which are supposed to be earned by the company, but are really paid out of the capital or from borrowed money. The object is to deceive stockholders into believing that the company is prosperous when it is not, thereby inducing them to purchase more stock or persuade their friends to do so. When stockholders become suspicious false statements are made as to the earnings, expenses, value of the franchise, etc., and thus they are quieted, while the manipulators of the company's affairs

*The issuance of a stock dividend, although in many respects analogous to stock watering, is not open to the same objection, since the issuance of the additional stock does not involve a marking up of the book value of the company's assets beyond their actual value. Some of the best managed companies pursue the policy of paying very small cash dividends and capitalizing their surplus accumulations in this way from time to time, thus keeping most of the earnings in the business while giving the stockholders what amounts to a fair return on their investment.

perhaps are selling out or "unloading" their stock quietly, at a good price, leaving the corporation wrecked. In rare instances, however, fictitious dividends may be justifiable. Thus when a succession of prosperous years is followed by one of disaster and loss, after which the business promises good returns again, it may be proper to continue the same dividends through the bad year, rather than destroy the regularity of them to stockholders. An illustration of this policy is the Chicago, Burlington & Quincy Railroad Company. In 1888 the company suffered severely on account of a strike among its locomotive engineers. Though frankly admitting that no dividends were earned that year, the company paid the usual dividend rather than disturb the value of its stock and disappoint shareholders. Under the circumstances this was justifiable.

Corporations are not permitted in law to declare and pay dividends upon stock when their assets, at a fair valuation, are not sufficient to pay their outstanding indebtedness to creditors in full, and if directors and officers of a corporation knowingly declare and pay dividends under such circumstances, they are generally held individually liable for all of the existing debts and obligations of the corporation and those subsequently contracted. The payment of such dividends is considered a fraud and has in instances been indulged in to procure to the stock-

**Illegal
Dividends**

holders assets of the corporation which should have gone to the payment of corporate indebtedness. As long as the corporation is solvent and has ample assets with which to discharge its existing indebtedness, there is usually no restraint upon paying dividends, though unearned. This is a dangerous proceeding, at all events, and the creditors, whose obligations have accrued subsequent to the payment of such dividends, are, under some circumstances, permitted to recover from the stockholders the dividends so paid, when subsequent insolvency demonstrates that the capital was impaired by such payment of dividends, and suspension of business and failure followed.

The surplus fund, reserve fund, or sinking fund is the accumulation of a portion of the net profits of the corporation set aside each year as a contingent fund to liquidate a debt, meet reverses or enable the company to declare a uniform rate of dividend whether the earnings are uniform or not. For the purpose of marketing the stock and avoiding the fluctuations in value which would be caused by a fluctuating dividend, the surplus fund is created, and if the net earnings should fall below the usual minimum dividend limit, the surplus is then drawn on for the deficiency. This enables the company to declare a uniform dividend, gives better satisfaction to the stockholders, who know about what dividends to expect, and makes the stock much more salable and desirable to investors.

A sinking fund may be created to meet an outstanding obligation falling due at some future date. If it is a bond issue, the deed of trust given as security for the bonds usually provides that a certain sum shall be set apart out of the net profits and paid to the trustee. The trustee then invests these sums in the company's bonds of the issue to be retired, or any other issue of the company, according to the provisions of the trust deed, and these are held in trust until the final settlement, when the matured bonds are canceled and returned to the corporation. The trust deed may provide that the trustee is to invest the sinking fund in bonds of other companies or it may be left to his discretion.

CHAPTER XXX.

CORPORATIONS—Continued.

DIRECTORS; DUTIES OF OFFICERS; BY-LAWS; RECORDS.

The owners of the stock of a private corporation, as soon as the charter is granted by the state and the corporation fully organized, proceed to choose and elect a board of directors, and the board of directors, after their election, proceed among themselves to elect the officers of the corporation. It is generally necessary that at least a portion of the directors must be residents of the state which granted the corporate charter. The number of directors ranges from three up to practically as many directors as is considered necessary to conduct the business of the corporation.

Board of
Directors

It is usual in large corporations doing an extensive business to elect directors in three classes, one-third to be elected for one year, one-third for two years and one-third for three years. The reason for this is to prevent a complete change in the board of directors at any one election. Good business prudence demands that a large proportion of the directors remain in office because of their familiarity with the details of the business being conducted. If this method is adopted, at the expiration of one year from the first election an election would be held to elect directors to fill the places of those elected for one year, thus retaining in office the two remaining classes whose terms have not expired, and so on with the other classes of directors as their terms of office expire.

The directors, immediately after their election, hold a meeting called a "directors' meeting." At this meeting the directors elect the officers of the corporation, which usually consist of a president, secretary and treasurer. Other officers of the cor-

poration are frequently a number of vice presidents, an assistant secretary and an assistant treasurer. These are customary officers of large corporations and not usual in small concerns.

It is generally the duty of the board of directors to formulate and adopt by-laws which are made for the government of the officers, directors and affairs of the corporation.

By-Laws These by-laws are required by law to be reasonable and to be in conformity with the provisions of the charter and the statutes of the state under which the corporation is organized. The by-laws should prescribe the number of directors, the offices to be filled by election, the mode and manner of calling general and special stockholders' meetings, general and special meetings of directors, general and special elections of the directors and officers, and the duties of the individual directors, officers and agents of the corporation, and should provide for the term of office of the directors and officers to be elected.

The president of a corporation is usually considered the legal head of the corporation, and when an act pertaining to the business of the corporation is performed by him, it is considered that he has binding authority to act as the agent of the corporate body. The president, however, is subject to the regulation of the board of directors and also to the restrictions and regulations prescribed in the by-laws.

The general duty of the secretary is that of custodian of the books and records of the corporation and the corporate seal, and to attach the corporate seal to written instruments when required. The president and secretary are the officers usually authorized by the board of directors to execute any instrument, note, bond, bill of sale, etc., in the corporate name, and under the corporate seal, that may be necessary to be executed by the corporation.

The usual duties of the treasurer are those of a fiscal agent,

to keep the funds of the corporation in some safe depository, to keep the officers and directors informed as to the financial condition of the corporation and the amount of funds in its treasury, and to prepare and keep the financial records of the corporation. The treasurer is the officer usually empowered to

Treasurer sign checks and to pay out the funds of the corporation, but, like the president and secretary, he is bound by the by-laws and should never pay out money in any large amount unless specifically authorized by the board of directors to do so, or unless the corporate business is such and the by-laws so stipulate, that such payment should be considered one of the regular duties of the treasurer.

The by-laws of a corporation should provide for frequent stated meetings of the directors, who should assemble at the general offices of the company under parliamentary rules of order, and in such manner transact the business of the corporation. The president of the corporation, by virtue of his office, presides as chairman of the meeting. Reports from the treasurer and secretary and of the general manager (in

Meetings of Directors corporations where there is such officer) are read, and from the reports and recommendations of those officers the business is taken up. It becomes the duty of the secretary to keep full and complete "minutes" of what transpires at the directors' meetings as well as at the stockholders' meetings. These "minutes" should be transcribed fully into a book kept for that purpose, known as a "minute book." The business should be transacted by resolutions voted upon by the president putting the question and calling for "Yeas" and "Nays." The majority favoring or disapproving a resolution generally decides the action of the directors upon the matter.

The duty of the secretary in keeping and in transcribing these "minutes" is a very important one, as often very important transactions are invalidated or made uncertain by carelessly or mistakenly transcribed "minutes." Every reasonably important

act of a corporation should be first voted upon by the board of directors and the resolution correctly transcribed into the "minute book" by the secretary. The "minutes" when transcribed into the minute book should show what directors and officers were present and those that were absent, and should always show that a "quorum" was present. A quorum is the number of stockholders or directors, usually a majority, prescribed by the laws of the state and the by-laws of the corporation as being necessary for the holding of a valid meeting for the transaction of corporate business, and if a meeting is called and there is not a quorum present, the meeting has no power to transact any business except to adjourn to some particular time and place. A very important duty of the board of directors, which is frequently neglected and omitted, is the auditing of current bills owing by the corporation, and ordering the treasurer to make proper payment. Great evils have grown out of the practice of allowing a treasurer to audit and pay bills at his own discretion. The best regulated corporations always strictly observe this rule.

When the minutes of the corporation are transcribed by the secretary into the minute book they should be signed by the president of the corporation and "attested" by the secretary. These signatures are very strong marks of authenticity and should never be omitted. Under no circumstances should minutes be transcribed upon loose sheets of paper and kept unbound or pasted into the minute book instead of having them written therein in regular manner. It is usual at the next succeeding meeting of the directors or stockholders to "approve" or order "corrections" in the minutes of the preceding meeting as the case may require, and the subsequent approval of the minutes confirms the prior resolutions and the acts of the various officers performing them.

The secretary of a corporation should keep a book, called

a "stock certificate book," from which book stock certificates should be issued and a record kept of the date, the number of shares, and to whom issued, and where stock is transferred from a stockholder to any person the original certificate should be surrendered and the secretary should issue a new certificate in lieu of the old one, which should be canceled and attached to its former stub in the certificate book and proper record kept of the transaction.

**Stock
Certificates**

It is usual to include in the by-laws a provision for the removal from office of directors or officers in the event that the majority may deem it for the best interests of the corporation. This provision is usually followed by a further provision giving directors the power of appointing a successor or of calling a special election, to fill the vacancy caused by such removal.

**Removal of
Officers**

The officers and directors of a corporation are required to be particularly careful that no act is done by the corporation which is in violation of the laws of the state or of the powers conferred by the charter. The directors and officers are personally liable for such illegal acts, and it frequently subjects the corporation to the liability of a forfeiture of its charter.

Illegal Acts

The directors of a corporation must act as a board and not singly. Several directors cannot bind the corporation by their several acts unless the acts are directly within the scope of their authority. All contracts—conveyances of corporate property—the creation of corporate liability—should be authorized by the board of directors in meeting assembled. The authority should be by resolution, which should be fully transcribed into the minute book by the secretary. Directors who seek to bind the corporation by their individual acts, subsequently repudiated by the corporation, are personally liable to the aggrieved party. It sometimes becomes necessary, on account of some emergency, that the officers

**Important
Acts**

of a corporation consisting usually of president, secretary and treasurer, are called upon to perform an important act before it is possible to convene a meeting of the board of directors. Such acts are excusable under the circumstances, but should immediately be ratified by the board of directors in regular manner. If power to perform important acts is conferred by the by-laws upon any of the officers of the corporation, the board of directors at frequent intervals should call a meeting and ratify, approve and confirm the acts of the officers, letting the minutes show in detail the acts and transactions confirmed.

Signature

Where the corporate signature is required to be signed to written documents, it should be the name of the corporation "by its president" and "attested" by its secretary and sealed with the corporate seal. An example of a proper corporate signature is as follows:

The Chicago Coal Mining & Quarrying Co.,
By John Doe, President.

Attest: Richard Roe, Secretary.

[Imprint of corporate seal.]

The seal of a corporation is generally a device embossed upon the document to be signed, being the name of the corporation, with the location of its principal place of business, as "Chicago, Ill." and the word "seal." The "attaching" or "affixing" of the seal is the act of imprinting the device upon the document to be executed.

Seals were in olden times used as signatures by individuals, and originated from the ignorance of the masses of the common people, who were unable to write their signatures. Upon the advent of corporations, which, being unable to physically do any act, or to write a signature, a "corporate seal" was used as the supreme designation of a corporate signature, the signatures and attestations of its officers being considered of less consequence than the "affixing"

Seal

of the corporate seal. At the present time it is not always necessary, but advisable, to attach or affix the corporate seal to all documents executed in the name of the corporation. The "adoption" of a corporate seal is one of the first acts of the directors of a corporation. The by-laws should prescribe the style of seal and designate the officer, universally the secretary, to be the custodian of it and affix it.

The existence of a corporation can be terminated at the will of the stockholders, who may, by voting so to do, surrender the charter of the corporation to the Secretary of State to be cancelled. Before this can be done, however, proof must be furnished the Secretary of State that all the corporate debts have been paid and the remaining assets and property distributed to the shareholders. This plan often becomes advisable when the corporate enterprise is no longer considered profitable, and to further maintain the corporation would mean an unprofitable expenditure of time and money by the stockholders.

**Termination of
Existence**

CHAPTER XXXI.

CORPORATIONS—Continued.

SUBSIDIARY CORPORATIONS; CONTROL AND MANIPULATIONS.

Subsidiary or auxiliary companies are those which are formed or controlled by, or are dependent upon some large company. It frequently becomes necessary in order to promote the success of a corporation to organize a subsidiary company as a feeder or helper, for the purpose of carrying out a particular part of the enterprise, such as supplying the corporation with raw material, disposing of its finished product, called a "selling company," constructing buildings or bridges, called a "construction company," etc. It may be that the parent company has not sufficient means to properly carry out a subordinate purpose or develop an enterprise which will be collateral and very beneficial to the company. A new and subordinate company may then be formed out of the capital furnished by those stockholders of the parent company who may have money to invest, and the building or other property of the subsidiary company may then be leased to the parent company. Thus a railroad company, through a subsidiary corporation, builds a hotel at a summer or winter resort where one is needed, hoping thereby to increase its passenger travel, or develops large sugar plantations along its line to add to its freight traffic. An electric street car company needing a new power house and not having the necessary funds with which to build it, and not wishing to issue bonds or increase its capital stock, forms a subsidiary company by which the power house is built and leased to the controlling company. Nearly all of our railway systems have branch lines, which at greater or less

Subsidiary
Companies

length reach from the main line into some agricultural section or to mines or cities located away from the main line. In this way transportation facilities are furnished to distant sections and an outlet is afforded them for their products, while the earnings of the main line are perceptibly increased by the business brought to it. Sometimes these branch lines have been expensive to build, where the attempt is to reach some mining district, and the money for their construction was obtained by issues of branch line bonds by the subsidiary company which may have been guaranteed by the parent company or were made valuable on account of a lease contract with the controlling company whereby the income of the branch road is assured, and the interest on its bond issue and sinking fund is provided for.

Another reason for the formation of subsidiary or auxiliary corporations is the manufacture and control of by-products. Take, for instance, a corporation engaged in mining coal. It frequently becomes necessary in developing the vein of coal to remove a large quantity of fire-clay, also a red shale, which products in themselves are valueless to the coal mining corporations, but a subsidiary or auxiliary company is formed for the purpose of manufacturing the fire-clay into fire-brick or

**To Control
By-Products**

other marketable product, and another corporation is formed for the purpose of preparing and vending the red shale, which is a cheap and excellent material used in the construction of roads. These companies are, of course, dependent upon the "parent" corporation for their raw material and are usually related by contracts specifying the price to be paid for this material, and requiring that the parent corporation shall furnish such quantity of raw material as may be agreed upon as being sufficient for the purposes of the subsidiary corporation.

Perhaps the reason most frequently met with for the formation of subsidiary companies is where a corporation owning patent rights or franchises parcels out the territory which it

controls to various subsidiary organizations, which may pay yearly royalties or percentages, or may pay for the privileges they get by giving a "lump sum" in cash, or by giving the parent company a part of their capital stock, or by a combination of all of these "considerations." In this way the stockholders of the parent company avoid much of the risk, and also the necessity of raising a large cash capital. This method has been pursued by the American Bell Telephone Company and other well known companies with signal success. Subsidiary companies, while being distinct corporations, are dependent upon the controlling company, usually, for their existence, and almost universally for their financing and management to a considerable extent.

Auxiliary companies are sometimes the medium through which profits that should belong to stockholders of the parent company are diverted to the pockets of the directors and their associates. In the history of railroad building in the United

States there are many instances where the managers of a railroad company have organized a so-called "construction company" to build an extension to its lines, and have then formed a separate corporation in which the ownership of the extension was nominally vested, and which proceeded to make a contract with the construction company to build and equip its line, paying for it with its bonds, issued for an amount in excess of the actual cost, and also with its entire capital stock, which by some fiction of bookkeeping was made to appear paid up in cash. The extension having been built with the proceeds of the bonds, or perhaps a part of them only, the next step was to sell or lease the new line to the old company on terms that made the stock held by the construction company a valuable asset. This and the remaining bonds, if any, could then be divided in kind or sold and the proceeds distributed in cash. The morality of such a transaction as this is, to say the least, questionable, though judgment should not be

To Develop
Territory

Corporate
Manipulations

passed in any specific instance without full knowledge of all the facts.

Of late corporations have been organized for a new function, i. e. that of holding a controlling interest of the stock of other corporations. The validity of these "parasite corporations," as they have been called, is yet to be passed upon by the courts. If permitted to stand, they may have far reaching consequences by giving a few men

Securities Companies control of large interests, although owning comparatively little capital. Let us consider the case of a stockholding corporation with, say, \$60,000,000 capital and this capital invested in, say, 51 per cent. of the stock of a railroad capitalized for \$100,000,000. The holders of a bare majority of the stock of the stockholding or parasite corporation would then exercise control over both corporations. Thus \$30,000,100 of stock would be able to control \$100,000,000 of capital. But let us carry this one step further and suppose a majority of the stock of the parasite corporation held by another company of the same kind with a capital of, say, \$31,000,000. The owners of only a little over \$15,500,000 of its stock would then exercise effective control of the \$60,000,000 company, and through it of the \$100,000,000 company. This is an instance of a lesser corporation controlling a greater. It is diametrically the opposite of the subsidiary corporation. An example of a parasite corporation is the Northern Securities Company, recently organized for the purpose of merging the control of the Great Northern, Northern Pacific and Chicago, Burlington & Quincy Railroads. This attempt of merger has been declared illegal by the

Merger Illegal courts on the ground of public policy, since such a combination would remove competition, the three roads being nearly parallel. The method of controlling a greater corporation by means of a securities company holding a majority of the stock, however, is a legal proceeding, in all of those states where one corporation is permitted by statute

to own shares in another. It is merely an extreme exercise of the principle of "majority rule."

Stockholding corporations designed to control greater corporations by means of the majority rule, as outlined above, savor somewhat of the methods of the so-called "trusts," which will be considered in the next chapter.

CHAPTER XXXII.

CORPORATIONS—Continued.

COMBINATIONS; TRUSTS; PROMOTION; UNDERWRITING.

The word trust has been perverted during recent years from its proper signification. Properly speaking, trusts are of many kinds, but they all imply the placing of property or power, or both, in the hands of agents who are called trustees, and whose functions in relation thereto may be so broad as to permit the widest possible scope in the management of a business or the exercise of authority, or they may be limited to the merely nominal holding of title without any discretion or authority whatever, as in the case of real estate held for the benefit of another. Trusts of this character are as old as human law and as varied as human experience. An example of a pure trust may be found in what is known in modern financiering as the "voting trust."

Definition of
"Trust"

A voting trust is an arrangement whereby the stockholders of a corporation part with their voting power for a specified time or term, and thus for such time give up their control over the affairs of the company. The object is to prevent changes of management which might arise in case a majority of the stock should change hands, thereby perhaps greatly diminishing its value by radical changes of policy. If all or a majority of the stock is placed in the hands of trustees, who give in return trust certificates entitling the holders to their dividends the investment becomes separated from the management. Holders of trust certificates may transfer their holdings, but the management continues unchanged. The Reading Railroad is an example of a corporation controlled and managed by a voting trust. This form of

Voting Trusts

trust is chiefly for the protection of bondholders, who are thus assured of a uniform management of the corporation by competent and experienced men, who will see that the interest upon the bonds is promptly paid, and the sinking fund provided for.

The rapid growth and development of the manufacturing interests of the United States during the last twenty years of the nineteenth century put into vigorous operation the laws of trade, one of which is that as industries grow in volume they tend to centralize. The large establishments can make and sell cheaper than the small ones. They can buy the raw material cheaper, avail themselves of the most approved machinery and employ the best skill and business ability. Fierce competition is constantly hammering down prices and the effect is to drive concerns into combinations whereby they may increase their capital and secure the benefits of a large volume of business. This tendency was manifest some years ago in the formation of corporations and changing of partnerships to corporations. The same causes continued to operate and produce the combination of corporations into trusts.

A trust may be defined as a combination of the capital of several corporations under one management whereby the cost of production is reduced, the amount of production limited and regulated, and the cost of the article to the consumer is controlled. Attempts were first made some years ago to secure the

benefits of co-operation between manufacturers by
Trusts agreements to sell through a common agent, and
at agreed prices, but the courts held such agree-
ments to be not binding, and members often secretly violated
them, so that it became necessary to make an absolute transfer
of the property of each member to the trust. A trust takes the
management and ownership of the property out of the hands
of the various corporations composing it, and deprives them of
the power to withdraw their assent.

The method of procedure in the formation of a trust is for

each of the parties to incorporate his establishment, if it is not already incorporated. The stock of these various corporations is then turned over to the managers of the trust, called trustees,

and in return for it the trustees issue trust cer-

How Formed tificates similar in some respects to shares in a corporation. These certificates recite that the

holder is a beneficiary of the trust to the extent of so many shares; and the certificates are assignable and transferable in the same manner as certificates of stock, though their legal status is in many respects dissimilar. It will be perceived that under this exchange the trustees hold a majority of the stock in each of the corporations and are able to elect the directors and officers of each concern and thus control the management to the smallest detail. They can close one factory, enlarge another, consolidate

others, regulate the output generally and control

**Powers of a
Trust**

the price. Those concerns which refuse to join

the combination are crushed, if possible, by com-

petition. The certificate holders are not injured by the closing up of this or that establishment belonging to the trust, since their profits come from the whole organization and not from any particular part. The holders of trust certificates elect trustees annually, and with the performance of that function their power ends. The trust certificates are watered to the point where the rates of dividends will be very moderate, and then sold upon the stock exchange like other stock.

This organization is called a trust because the stockholders part with their voting power, and practically repose absolute power in the trustees. The acts of the trustees and books of account are usually not open to inspection by the certificate holders. No limit is placed on the amount of the trust certificates that may be issued, and no question can be raised as to the exercise of discretionary power by the trustees. There is practically no limit placed upon the powers of the trustees in conducting the business.

The greatest trusts formed in this manner were the Standard Oil Trust, the Cotton Seed Oil Trust and the Sugar Trust, but there seems no longer to be any doubt that a trust formed in this way is illegal. Recent decisions of our courts have so declared, on the ground of public policy. Hence it is that a large number of the trusts are now adopting a different mode of organization—that of the corporation plan, as exemplified by the Diamond Match Company. That company's plan was to organize one gigantic corporation and have it buy up and own outright all of the competing manufactories, paying for them either in cash or shares of stock.

Trusts Illegal This form of organization, although called a trust, is in reality a great corporation, and it is certainly better to have the large corporation than the trust.

Gigantic Corporations The unlimited power possessed by the trustees in the case of a trust, their concealment of the condition of the business, and the secrecy of their acts, is dangerous not only to the financial welfare of the certificate holders but also to the public.

There is another class of corporations, which are formed by the consolidation of several corporations into one. The method of forming such a consolidated corporation is to have the stockholders of two or more existing corporations vote to consolidate. This gives birth to a new corporation. The old corporations are merged into the new, and although the new corporation may

Consolidation of Corporations take the name of one of the old corporations, it nevertheless bears the same relation to all of them.

The new corporation issues capital stock to the stockholders of the consolidated corporations, sometimes share for share, sometimes upon an increased capitalization. The new corporation is liable for all the debts and obligations of each of the consolidated corporations, and succeeds to all the property, credits and effects which belonged to each at the time of the consolidation. Notice must be given to the Secretary of State of the action of the corporations in consolidating, and they must

record the proceedings resulting in the consolidation, with the Secretary of State, and usually in the county where the principal office of the corporation is maintained.

Industrial corporations are those which are engaged in the manufacture of the great utilities of life, such as steam engines, harvesting machines, electrical apparatus, steel or oil. By combining these into a virtual monopoly, the waste and expense incident to competition, such as numerous traveling salesmen, advertising and office expenses are saved and thus the net profits are greatly increased. Owing to the ability of the combine to earn net profits greater than the total profits of the different concerns, under the competitive system, the combine may be

**Financing
Industrials**

capitalized for a much larger amount than the total capitalization of the individual concerns. Most of the large companies in the United States are financed in New York, owing to the superior facilities there for such transactions on account of its greatness as a financial center. Suppose there are a dozen companies engaged in the same line of business with a total capital, say, of \$30,000,000. After looking the field over carefully, and acquainting themselves with the present and prospective earnings of the various properties, the promoters conclude to combine these into a single corporation with a capitalization of \$100,000,000. A corporation is organized with a hundred millions capital, thirty millions of which is to be preferred,* and seventy millions common stock. A suitable name, suggestive of the business and comprehensive in scope, is chosen. Arrangements are made by the promoters with several bankers in Wall Street to take portions of this preferred stock and pay cash for it. A block of the common stock goes along with each sale of preferred stock as a bonus, together with the privilege of naming a member of the board of directors of the new company. Each of the old concerns is now

*Instead of preferred stock, bonds may be issued, and these would be preferable in case the company expected to retire them.

bought up by the new company, payment being made in common or preferred stock, or cash, or a combination of all of these, as the parties may have previously agreed.* The new company takes over all assets and assumes all liabilities of the old companies and provides a working capital out of the sale of the preferred stock. This done, the combination is effected and the operation of the several properties continues uninterrupted under the management of the new board of directors and officers.

Having completed the combination as outlined above, the promoters find still left in their hands a handsome block of the common and perhaps some of the preferred stock as their compensation for putting the deal through. After the combination is made the Wall, Street bankers first place their preferred stock on the market, and as the business of the new company is known to be prosperous, the stock sells readily. Next the common stock is offered and disposed of, its sale being aided by that of the preferred stock.

The business of promotion is a species of agency especially devoted to the organization of companies and the floating of stocks and bonds. The promoter is one who has a financial acquaintance and knows where money for various classes of investments may be secured. It is almost necessary, however, in order to finance a large company that a bank or trust company should be enlisted in the operation, so that the sale of securities will be effected without any delay.

The bank or trust company acting in this capacity is known as an "underwriter," since it insures, or underwrites, the sale or disposition of the securities, taking itself such as it does not dispose of to other bankers by a given time. In this capacity a prominent New York

*In estimating the values of the several plants, the common method is to base the value upon the average earnings for a period of five years past, as shown by the books. Thus suppose it is agreed that the property shall be valued on a 10 per cent. basis, and the net earnings for five years average \$30,000, the plant would be worth \$300,000, due consideration being given, of course, to the condition of the property.

banking house* has achieved a world-wide reputation, besides reaping immense wealth from its operations. Sometimes the promoters enter into contracts with one or more bankers to the effect that the bank will buy a quantity of bonds upon the property of the new company at a given price. These contracts are then deposited with a trust company as collateral for a loan sufficient to buy up the properties (the promoters having previously secured options on each property). After the properties are bought, the bonds are issued and delivered and the loan is repaid.

Instances are not uncommon where consolidations are complicated by reason of the companies which it is desired to combine owning public franchises which are not transferable. The most

usual way of getting around this difficulty is for
 Operation the new company to hold the stock of the old com-
 Under Leases panies, or a majority thereof, in its treasury, and
 to operate under leases from the old companies. This is the plan followed in the case of the street railway systems in the north and west divisions of the city of Chicago, where the situation is still further complicated by a majority of the stock of two companies holding such leases, being in turn held by still another corporation—the Union Traction Company.

The evil effects of trusts and monopolies can scarcely be questioned, but it is far better to have the great corporation, although it is in effect a trust, than to have a combination of capital where its management is confined wholly to trustees not accountable to stockholders. Publicity is both the preventive and cure for a great deal of rascality in the world. In case of the great corporation, it pays its tax to the state, and is subject to proper limitations. Creditors are able to judge of its financial condition, and the public may determine whether it is

*J. Pierpont Morgan & Company. So successful has this firm been as underwriters that other bankers readily accept bonds and stocks offered by them, and thus through them promotion becomes comparatively easy.

conducting business within the limits of its charter. But whether the trust is a combination formed under the purely trust method, or a gigantic corporation, its objects are the same: the creation of a monopoly and the control of the market. For this reason public sentiment is hostile to it. Judge Thomas M. Cooley, a few years ago, speaking of trusts, said:

“A few things can be said of trusts without danger of mistake. They are things to be feared. They antagonize a leading and most valuable principle of industrial life in their attempt not to curb competition merely, but to put an end to it. The case of the leading trust of the country has been such as to emphasize the fear of them, and the benefits that have come from its cheapening of an article of commerce are insignificant when contrasted with the mischiefs that have followed the exhibitions in many forms of the merciless power of concentrated capital.”

CHAPTER XXXIII.

CORPORATIONS—Continued.

RECEIVERSHIPS; REORGANIZATIONS.

The affairs of private corporations are frequently wound up under the control of a receiver, who is appointed upon the application of some interested party by a court, usually in the county where the corporation has its principal place of business, or where some of its property is situated. There are many grounds for the appointment of a receiver. Chief among them is the doing of some illegal act by the corporation or its agents,

Receiver which would subject the corporation to a forfeiture of its charter, or when the corporation refuses or fails to pay a judgment or decree for money, or otherwise is unable to meet its obligations. A receiver is an officer of the court. He acts under the direction of the court and must report all of his doings to the court. His chief duty is the conservation of the company's property until it can be determined whether the business is to be continued or must be wound up, and if the latter, then to dispose of the assets and distribute the net proceeds to the proper persons as the court may direct.

The function of a receiver is often, therefore, a very important one. It frequently happens that the interest of all concerned requires the business to be continued while proceedings are pending, and in such cases the receiver is usually given the necessary authority. An illustration of this

Duties of Receiver would be in the case of the financial embarrassment of a manufacturing concern having on hand a large quantity of partly finished goods of little value in that condition, but which by the expenditure of a small amount of

money could be finished and marketed at a fair price. The receiver thereupon runs the factory under the supervision of the court, long enough to complete the product then under construction, which is sold by the receiver when completed, and the creditors thereby receive a much larger percentage on their claims than would be the case if the product were sold by the receiver before its completion. The chief reason for the appointment of a receiver, however, is to enforce a ratable distribution of the corporate assets among the creditors.

A corporation is said to be insolvent when its assets at a fair valuation are insufficient, if sold, to discharge the existing obligations to corporate creditors. It is possible that a corporation may be solvent, yet its stock practically worthless. Such would be the case of a corporation having just enough assets when sold to pay corporate creditors, leaving nothing for distribution to the stockholders in return for the sum invested by them in their stock.

When a corporation becomes insolvent or unable to pay its debts, or has exceeded its corporate powers, a court of equity will, generally upon the application of a creditor or stockholder, take charge of the affairs of the corporation and appoint a receiver to either continue or close up the business, subject to the court's direction. The directors of a corporation formerly had no power to commence proceedings for a dissolution of the corporation and appointment of a receiver or for the distribution of its assets among the stockholders, but the Supreme Court of the United States in the Wabash Railway cases laid down the doctrine that a company could itself ask for the protection of the court if such was for the best interests of all concerned. Under this doctrine many corporations are placed in the hands of "friendly" receivers, by means of proceedings and without notice to other creditors and the public, thus opening the door to great abuses of corporate privileges and no doubt in many instances inflicting

Insolvency

**Friendly
Receivers**

serious loss and injury on innocent stockholders. Directors sometimes mismanage corporations in order to get them into trouble and then by defaulting on the interest or other obligations of the company bring about a receivership and reorganization in order to "freeze out" and get rid of the stockholders and acquire the assets, after which the business is continued prosperously. Corporations sometimes procure the appointment of friendly receivers and effect a reorganization in order to get rid of certain bonds, guarantees, leases or other contracts which have proven unprofitable. Such proceedings, however, cannot be justified on grounds of business honor.

Only stockholders and creditors of an insolvent corporation are concerned in the settlement and distribution of the estate. The public generally has no interest in the matter. But in the failure of large corporations upon which the public is accustomed to depend for a particular service, like a railroad company, and especially one having subsidiary companies, the public is interested and the matter brings up a multitude of complications. The road must be kept running. It cannot be shut down, the property sold, creditors paid and assets distributed among stockholders, as in the case of an ordinary private business. Salaries and other running expenses must be paid and the business tided along until the entire property can be sold in bulk or a reorganization of the corporation is effected. When entering upon his

Receiverships duties the receiver will usually find many debts unpaid and pressing repairs needed, with a constant deficit in cash to meet current expenses.

The court will then authorize the issuance of receiver's certificates for the purpose of raising the necessary funds to carry on the business. These certificates are a first lien upon the property of the corporation, coming in before first mortgage bonds. Sometimes the cash requirements of the receiver are met by an assessment upon the stock and bonds of the company. The stockholders and bondholders may as well submit to an assess-

ment as have receiver's certificates issued, which are a first claim upon the assets.

Having the immediate necessities of the corporation provided for in cash, the receiver usually finds it necessary to have the accounts of the company gone over carefully in order to ascertain what the actual earnings of the business are. The prospects of the future business of the company are also taken into consideration, and with these at hand a reorganization committee* or banking firm is able to determine what the earning power of the company after the reorganization will be, and hence what its capital may be. If the capital must be reduced in order to bring it within the earning limits, then the bondholders and stockholders must suffer this loss in just proportions. Frequently the stockholders are required to bear the entire shrinkage, upon the principal that to them belong all the gains if the enterprise is successful, and therefore they should be willing to stand the losses. The stockholders, or bondholders, as the case may be, pay in their assessments to aid in the continuation of the business and usually are given additional stock (preferred) or bonds to cover the amount of the assessment so that in case the company in future years should become prosperous, they may bring forward their claims for recognition and payment.

To adjust the respective interests, the reorganization committee may have recourse to the issuance of stock in several classes, some of the shares being preferred as to the payment of dividends, the remaining, or "common," shares not being entitled to participate until the preferred stock has received a certain percentage, which may or may not be cumulative.† Likewise there may be an issue of bonds, called "income bonds," upon which interest will be paid

**Methods of
Reorganization**

*The reorganization committee consists of representatives of the creditors, stockholders and bondholders.

†Cumulative dividends are such as, if not paid, are added to future dividends, and thus accumulate until they are paid.

only in the event of its being earned. As in the case of dividends on preferred stock, the interest on such bonds may or may not be cumulative.

If a proper proportion of the bondholders of a corporation, usually one-half, are not satisfied with the reorganization as outlined by the committee, or the amount or kind of new securities to be given them for their assessment under the proposed plan, they may compel the trustees to begin foreclosure proceedings, and when the property is sold, bid it in and take the property in payment of their debt. The usual method in such an event would be for the bondholders participating in this movement to form a new corporation provided with the necessary working capital so as to be ready to make repairs and put the property in good condition, and also to pay off the non-participating bondholders who would be entitled to their pro rata share of the price realized at the sale. This would leave out the stockholders entirely. The new company could then issue its own bonds free from all obligations of the former corporation.

Foreclosure William W. Cook says: "The object of a reorganization is to avoid foreclosure. The prospect of a foreclosure is the cause of a reorganization. Frequently the reorganization is made after a foreclosure has been commenced, the object of the foreclosure being to cut off those persons who refuse to come into the reorganization. Sometimes the reorganization practically does away with the necessity of foreclosure, and this is the ideal condition towards which the times are tending."

Frequently newly organized railroad companies and large corporations issue bonds upon their property and franchises, ostensibly for the purpose of raising funds for extending and improving their existing property. These bonds, not being paid, at maturity, a foreclosure of the bond issue results. The property is sold under foreclosure sale and a reorganization is had, usually by a new class of investors, the property and franchises

transferred to the new organization, and the original stockholders get nothing for their investment. This is a plan much favored

Fraudulent by unscrupulous manipulators and organizers who
Foreclosure by such manipulation acquire for themselves and their associates the amount originally paid in by the unsuspecting subscribing stockholders. Railroad and mining corporations especially have been the means of filching the public in general of enormous sums by this means.

BONDS.

CHAPTER XXXIV.

GOVERNMENT AND CORPORATE OBLIGATIONS.

KINDS; REFUNDING; NEGOTIATING; FORECLOSURE.

A bond is an obligation or promise to pay money, which differs from a promissory note in that it is given under seal, the effect of which addition is, under the common law, that if default is made and payment has to be enforced by suit, the maker cannot plead want of consideration.

When a government desires to borrow money the customary method of obtaining it is to print and offer its bonds for sale. These are issued in convenient denominations. In this country the most common denominations are \$500 and \$1,000, but sometimes, if the issue is what is called a popular one, designed for sale among people of small means, a portion of the issue is made in denominations of \$100, or even less in some instances.

Government
Bonds

In fixing the rate of interest which the bonds shall bear, the government should, and usually does, take into consideration the condition of the loan market (commonly designated as the money market), and the state of its own credit, and makes the rate the lowest one at which it can reasonably expect to sell the bonds at par. If sold below par, the government will pay, and the investor will receive, more than the rate of interest named in the bond. The reverse is true if more than par is realized for the bonds. In general the nearer the selling price can be approximated to par the more favorable will it be for the maker, in the long run. Although it is not possible for the government to tell what price the bonds will bring until they are placed upon the

market and offered for sale, it is usually possible to gauge this nearly enough for practical purposes. Still, to guard against the contingency of unfavorable bids, it is usual to reserve the right to reject any and all that may be submitted, and if all are rejected, to make a new offering at a later date, with such changes as seem likely to yield a better result.

The length of time the bonds are to run is also fixed by the government, and is a factor in the price they will bring in the market. This is because investors prefer bonds having comparatively long terms to run, which relieve them from the necessity of reinvesting at short intervals. Not infrequently bonds contain a clause giving the maker the option to call them in and pay them at any time after a specified date. This, while it enables the maker to retire them and stop the interest, usually causes them to sell at a lower price than if they ran for a fixed period, or, in other words, the maker, in consideration of the option of prepayment, has to pay a higher rate of interest for that privilege.

As a rule, government bonds are not secured, but depend wholly upon the credit and stability of the nation by which they are issued. In the case of some of the weaker nations, as for instance Spain and China, some issues have been secured by a specific pledge of the revenue arising from certain customs duties. This, however, is the exception and not the rule in the case of government bonds. At different times the United States government has issued bonds to relieve the needs of its treasury. Those issued during the Civil War bore six per cent., but the credit of the country is now so exceptionally high that it is able to float its bonds at the very low rate of two per cent., and its later issues have been at that rate.

Refunding consists in putting out a new issue of bonds to replace an old one, which may either have matured or which may be called for payment (the option having been reserved) in order to gain the advantage of a lower rate of interest. Consolidated bonds or

"consols" are those issued to refund several other issues, combining all into one.

Coupon bonds are those which are made payable to bearer and the interest on which is evidenced by detachable coupons.

**Coupon and
Registered
Bonds**

These coupons are torn off as they fall due, and are usually collected through some bank. Registered bonds are so called because the name of the owner is registered upon the books of the treasury department of the government issuing them. Sometimes the principal only is registered and the interest is evidenced by coupons, as in the case of bonds payable to bearer. This is the common practice in the case of bonds issued by private corporations. With government bonds it is usual for the interest to be paid by check mailed to the owner's address. The advantage of registration is that bonds of this kind, if lost or stolen, are of no value to the finder or the thief, and hence are very secure.

In the United States the term government bonds, or "governments," as they are called, is limited to bonds issued by the general government. State bonds, or bonds issued by the governments of the several states, are, however, also government bonds, and differ in no essential respect from those of the national government, except as to their legal basis. They rest on the credit of a part of the people instead of all the people taken together. This is

**State and
Municipal
Bonds**

true also of municipal bonds, as those are called which are issued by counties, cities, towns, school districts, sanitary districts, or other public corporations. They are usually put forth for the purpose of raising funds for local improvements, such as the erection of public buildings, the building of bridges, or of water works, or of electric lighting plants. In many of the states municipal governments cannot issue bonds lawfully in excess of a certain percentage upon the assessed valuation of taxable property in the municipality, and not then unless authorized by a majority vote of the people.

A generation ago it was common, more especially in the middle west, for municipalities to issue bonds to aid in the construction of railroads. The burden of the debts thus contracted bore heavily upon the people in many instances, and suits were brought by the taxpayers to test their validity. As a result of a decision of the Supreme Court of the United States that these bonds must be paid, several of the States passed amendments to their constitutions prohibiting towns or cities from voting bond issues in aid of railroads.

"Voluntary contributions may be obtained from the citizens, but municipal bonds—bonds that must be paid by the city or county—can no longer be issued in those states," for aid to railroads.—Cook.

Bonds issued by private corporations differ from those previously mentioned, chiefly in that they are as a rule secured by mortgage on the property of the company issuing them. First mortgage bonds are those which are a first lien against the property pledged for their payment. Second and third mortgage bonds are similarly secured by second and third liens. In case of foreclosure the first mortgage bonds must first be satisfied from the sale of the pledged property. Then if there is a surplus the second mortgage bonds can be paid, in full or in part, as the case may be, and so on.

Income bonds are a peculiar class of obligations. They are usually secured by mortgage upon the property of the corporation, but they bear interest only in the event that the net earnings of the company, after satisfying prior liens, are sufficient to pay it. Unlike ordinary mortgage bonds, they cannot be foreclosed for failure to pay interest unless the net earnings applicable thereto should be willfully diverted and applied to other purposes. Interest on bonds of this class must, however, be paid out of the earnings before any distribution of profits in the way of dividends can be made to the stockholders of the company.

**Bonds of
Private
Corporations**

Income Bonds

Mortgage bonds may be secured upon lands, buildings, manufacturing plants, telephone and telegraph systems, street car lines, franchises, toll roads, bridges, railroad rights of way and equipment—in short, upon tangible property of all kinds. Sometimes the bonds are designated according to the nature of the security, as for example, terminal bonds, which are bonds issued by railroad companies upon the security of the valuable lands used for stations and office buildings and for switch and storage yards, etc., in the cities where their lines terminate.

Security for
Bonds

Collateral trust bonds are bonds issued by a corporation and secured by bonds or other securities owned by it and deposited with a trust company, or, it may be, in the hands of individual trustees, though the former is more usual. This form of bond is sometimes resorted to by corporations owning bonds of other corporations, which they do not wish to sell, or which they may not be able to market without their guaranty. It is most frequently used by corporations that make real estate mortgage loans, which they pledge as security for their own bonds bearing a lower rate of interest.

Debentures are unsecured bonds, and are a comparatively rare form of obligation for private corporations, owing to the difficulty of placing them on favorable terms.

Of many methods adopted to float a bond issue, the most usual is to enlist the services of one or more of the banking houses, trust companies, investment companies or firms making a specialty of dealing in such securities. In the case of a

Floating a
Bond Issue

private corporation the officers are required to make a full and explicit statement of its affairs, its assets and liabilities, its earnings past, present and prospective, the amount of the proposed bond issue, an exact description of the property to be covered by the mortgage, and any other facts which may be relevant or which the dealers may require. If the showing appears favorable the appli-

cant is informed that if upon thorough investigation the facts prove to be as stated and everything is found satisfactory the bonds will be negotiated. The bond dealers then detail their own representatives or agents to make the investigation, which is made in the most thorough and careful manner, and includes a searching inquiry into the character and standing of the officers and directors of the company making the application, its credit and business connections. Even when these are well known it is usual to revise previous information and make sure that it is in all respects up to date. The expense of the investigation falls upon the applicant, which may be required to make a deposit in advance, of a sum estimated as sufficient to meet the cost. Appraisers are employed to estimate the value of the property, and expert accountants are set to work to examine the company's books. In short, every available means is used to ascertain its true condition. The dealers also employ special counsel to report upon the legal status of the applicant, whether it is conducting its business clearly within the limits of its charter, whether it holds indefeasible title to its property, etc., and to see that all the formalities required by law are complied with when the bonds are issued. The result of all these investigations being found satisfactory, the next step is the execution of the mortgage, which is usually made in the form of a deed of trust to some trust company. Then the bonds are issued and may be offered for sale. Sometimes the dealers sell them on commission, and sometimes they buy them outright. In the latter case, if the issue is a large one, they may form a syndicate, or special partnership arrangement by which several dealers contribute the necessary capital and share in the profits of the transaction. Individual purchasers of bonds run less risk in buying those that are thus placed on the market by some house of established reputation, because as the company or firm that finances the issue usually invests its own or borrowed capital in the bonds until they can be sold, they can rely upon all the precautions

mentioned having been taken by the dealers for their own protection.

It is customary to include in the deed of trust securing a bond issue a clause providing that if the interest is not paid promptly as it matures, the entire amount of principal and interest may, at the option of the bondholders, after default has continued for a certain number of days, "become immediately due and payable." To prevent one or two holders of small lots of bonds exercising such option in derogation of the interest of the holders of a majority of the issue, holders of some specified proportion of the issue are usually required, under the provisions of the trust deed, to unite in requesting the trustee to institute

foreclosure proceedings before such action is begun. Foreclosure having been decided upon, the trust company files a bill in the proper court, alleging the default and praying that it be allowed to sell the pledged property in satisfaction of the debt. In the majority of cases the bondholders file a bill at the same time, asking that a receiver be appointed to take charge of the affairs of the company and conserve its assets for the benefit of all concerned. Not infrequently such action is taken by the stockholders before the bondholders have had time to act. If there is opposition, the court as a rule refers the case to a master in chancery, who, as an officer of the court, takes testimony and makes a report to the court, whereupon, if the report sustains the allegations in the bill, a receiver is appointed.

The receiver is also an officer of the court and makes reports thereto as often as may be required. Should the foreclosure proceed to a sale and all of the property of the company be swept away his functions thereupon cease. It often happens, however, in the case of railroads or other large corporations, that the bondholders do not wish to bid in the property at the sale and assume the conduct of the business, nor do they wish to run the risk that no other bid will be sufficient to pay the

debt. And it may also be the case that holdings of bonds and stocks are such that the interests of the respective owners are complicated. Furthermore it may appear possible to conserve the interest of all concerned, stockholders as well as bondholders, by postponing the foreclosure sale, which lies within the discretion of the bondholders, and endeavoring to effect a reorganization of the company upon a basis which will enable it to continue its business and give both the bondholders and the stockholders new and marketable securities in place of those previously held.

Reorganization is customarily effected through the medium of committees composed of bankers or others skilled in finance, who represent the various interests and endeavor to formulate a plan which shall be acceptable to all. The first task of a reorganization committee is to get authority from the bondholders and stockholders to represent them, which is no small undertaking in the case of a corporation the bonds and stocks of which are widely scattered, in Europe it may be as well as in this country.

Although the procedure is called reorganization, the customary method is to form a new company which bids in the property of the old organization at the foreclosure sale; and then issues its own bonds and stocks against the same and such new capital as may have been provided. In this way the interest of stockholders and bondholders who do not participate in the reorganization is eliminated. Non-participating bondholders get only such percentage of the proceeds of the sale as their bonds bear to the total issue, and as there are very likely no other bidders aside from the reorganized company it is usually enabled to make a low bid. Non-participating stockholders of course get nothing. Sometimes, however, when circumstances appear to justify it, and their holdings are small, non-participants are permitted to join the new organization after the sale on payment of a sum exacted as a "penalty."

Many reorganizations of American railroads are the conse-

quence of the vicious system of financing employed at the time they were constructed. Too often the bond issue was made large enough to pay the entire cost of construction and equipment and also a handsome profit for the promoters, the stock being either retained by the promoters or given as a bonus to help the sale of the bonds which could not otherwise be marketed. If the road could be made to earn the interest on the excessive issue, well and good; if not, then disaster must follow, sooner or later.

SECURITIES AND INVESTMENTS.

CHAPTER XXXV.

BONDS, STOCKS AND MORTGAGES.

GOVERNMENTS; STATE AND MUNICIPAL; KINDS OF MORTGAGE SECURITIES.

By the term securities we usually mean stocks or bonds of corporations, either public or private, and mortgages upon real estate. These are evidences of property, and in the eyes of the law are regarded as personal property. Being negotiable or assignable by mere delivery, and readily convertible, they are extensively used as collateral security for loans and other contracts, and have gradually taken the name of securities. The value of any security depends upon the character of the property which it represents, and the rate of income which it is reasonably certain to produce. The more secure the investment is regarded, the higher its market price is apt to be, and therefore the lower the rate of income which it yields. Investors who are willing to assume risks are comparatively few, and those who wish to be certain of the return of their capital are satisfied with smaller dividends.

United States government bonds may be classed as the highest order of securities before the public. Our faith in the integrity and stability of the government is such that we do not hesitate to invest in its bonds at very low rates of interest.*

Governments During the great Civil War our government issued large amounts of bonds for war purposes, but the amount has been gradually reduced, by payment

*The lowest rate which any of the government bond issues draw is 2 per cent.

of the public debt, and the rate of interest lowered, while the price has advanced until they are no longer a profitable class of investments. The national banks now absorb a large portion of our government bonds in compliance with the National Banking Law. The remainder of them are mostly taken as investments for trust and other funds where safety and facility of conversion are greater considerations than a high rate of interest. They are considered absolutely safe and always marketable.

State and municipal bonds are in some instances high class securities, and in others of a very low grade. Unfortunately many of the states have not preserved their credit in financial markets. Swayed by popular impulse, they have, in times of stress been led into the suicidal error of repudiating their just obligations. A lack of patriotism and state pride combined with a knowledge of the fact that a "state cannot be sued" has in several instances resulted in dishonest legislation. Even where bonds have been issued with an honest purpose, there have come

**Unreliability
of State
Obligations** political disturbances leading to a revulsion of sentiment, or affording an opportunity to demagogues to assail public creditors and perhaps secure a majority of votes against the payment of just debts.* For these reasons, state securities are not usually regarded favorably by investors.

"Whoever buys the paper of a state should do so with the distinct understanding that he has nothing but its honor to rely upon, unless the commercial relations of its citizens should be of such a character as to make its financial credit important to their business interests. There is for that reason little likelihood of such states as New York and Massachusetts ever repudiating their obligations." These states contain the two greatest money centers of the country, and being the chief lenders, they could not afford to set an example of repudiation to other

*Twelve states of the union have broken faith with their creditors at different times, and either openly repudiated or ignored their outstanding obligations in whole or in part.

states. What has been said in regard to the uncertain value of state securities applies to some extent to county, town and municipal obligations. The same people compose the state and the local organization, and the same moral sentiments exist concerning both obligations. There is this important distinction, however, that municipal obligations can be enforced in the courts, provided they are properly created. There are

**Local
Securities**

many points which go to determine the value and reliability of municipal securities. The first of these is the legality of issue. If the bonds have been in litigation their legal status has probably been fixed by the courts, but unless this is the case, their legality should be investigated by a competent lawyer. Besides the legal points involved and the disposition of the municipality to pay, there is also the question of its ability to meet its obligations. The laws in many of the states limit the power of municipalities to issue bonds to a small percentage of the taxable property,* thus aiming to protect both creditors and taxpayers, but since the bonds must be paid out of the taxes, and taxes are dependent upon the value of property, it follows that the payment of a bond issue is contingent upon the general prosperity of the town or business community. As our cities and other municipalities grow in wealth and population, they become better able to meet outstanding obligations, especially where bond issues have not kept pace with population, and hence the tendency of this class of securities is to gradually improve in the estimation of investors. One disadvantage in the case of bonds issued by small municipalities is that not being widely known the market for them is a limited one. This makes them to some extent undesirable investments, except for people who do not regard ready negotiability as important. With such investors they are favorite securities. The bonds of some of the larger cities are only slightly less esteemed than those issued by the general government.

*In Illinois the limit is 5 per cent.

Leaving now the consideration of the securities of public corporations, we come to that larger class of mortgage securities based upon private property, either corporate or individual. Mortgage securities may be divided into two general classes, one of which is based upon the actual value of the property mortgaged and the other upon the earning power of the property. Thus when a man loans money and takes as security a mortgage upon the house and land of the borrower, he estimates the actual value of the house and land. He does not wish to become in effect a partner with the mortgagor by making the repayment of the loan dependent wholly upon the borrower's success in business. He wishes the security to repay the loan in case the borrower fails to pay; hence if he is prudent he loans but one-half or two-thirds of the actual value of the security, so as to leave abundant margin for shrinkage in case of forced sale. But suppose he loans to a corporation—say a railroad company—by purchasing its bonds, he depends for the security of his money not upon the property as such, consisting of road-bed, depot buildings, etc., but upon the business success of the road. If the road does a profitable business the bonds are safe, otherwise not. There is not a railroad in the United States that would sell for its bonded indebtedness in case its business was to cease. The rails and ties would be worthless except as old iron and wood, and the right of way could be sold to neighboring farmers at only a small price. Considered simply as real estate, the entire property of a railroad company would be worth but a small fraction of its bonded indebtedness. The value of the bonds, then, is sustained by the profits or income from the property. From this another reason is apparent why when a railway company becomes financially embarrassed the courts appoint a receiver to take charge of and run the road, pending a settlement with the creditors. To stop the operation of the road would be to vastly depreciate if not ruin and destroy the property. The investor, therefore,

Mortgage
Securities

who contemplates the purchase of railway securities should consider well the present and future earnings of the corporation. If its earning capacity for any reason becomes seriously impaired, nothing can save the bondholders from loss. And yet railroads are such a necessity to our civilized life, and their traffic so dependent upon our industrial system that their income can be made the basis for borrowing money as safely as can a dwelling-house.

It is apparent from the foregoing that the desirability of railroad bonds as an investment is dependent upon two conditions, viz.: With old, established roads these two factors in the problem can be easily ascertained, but with new roads the question of earnings can only be surmised, and if the management of the company is defective, or the earnings are overestimated the result is likely to be a receivership and reorganization, with all of their disastrous consequences to investors. In the case of street railroads, telephone systems, water and gas works, the franchise is usually a valuable asset which will support a considerable bond issue, especially when it has many years to run. On the other hand, the danger of competition is always a menace to the income of a corporation unless it has an absolute monopoly. Thus gas and electric companies are competitors and the profits from each may be correspondingly reduced.

The value of the security afforded by bonds of ordinary commercial and manufacturing corporations must be estimated wholly upon the merits of each individual case. Each interest must be investigated in all its bearings in order to reach a wise decision, while competition, management and public requirements are important factors which should be carefully considered by the investor before placing his money.

There are many uncertainties that threaten stocks which do not appertain to bonds. The latter are secured upon the property or earnings of the corporation, and are fixed and determined.

but the value of stocks rests largely upon the earning power and the management of the corporation and also the future conditions under which the company may conduct its business. The investor in stocks should, therefore, anticipate the future and weigh the probabilities of business success. A business which is successful to-day may be run at a loss next year or compelled to close down entirely. Competition is constantly shifting and must be met in a variety of forms. New inventions and labor saving processes may give a temporary advantage to those who discover or secure them first, and reduce the dividends of companies which were prosperous before. The telephone competes with the telegraph, and the trolley car cuts into the suburban traffic of steam railroads. Lines of business which yield large returns especially invite competition, and as a result the business may become overdone and profits entirely disappear. The stock of companies formed to use or promote new and useful inventions is frequently the most profitable and where a monopoly is thus secured for a time, large fortunes have been made. Late investors in such stock, however, are very likely not to fare so well. Every hour shortens the life of a trade monopoly. Among the safest stocks are those of well managed banks and insurance companies. The states exercise a supervision over these companies, and their shares can generally be relied upon as representing actual cash investments, especially in those states where the laws are strict concerning such corporations and the general administration of law is considered good. In the case of banks, however, the stockholder often incurs the risk of liability to creditors to the extent of the face value of his stock, in the event of the bank becoming insolvent.

Mortgages on real estate are considered a desirable class of securities, especially when the mortgage represents not more than one-half the actual market value of the property, and where the property is located in a prosperous and growing community.

Many insurance companies and savings banks decline to loan upon wooden houses, confining their investments to securities upon either stone or brick improvements for the reason that these are less liable to deteriorate by the ravages of time or to be destroyed by fire.

**Real Estate
Mortgages**

Other investors prefer mortgages upon residence property upon the theory that a man will protect his home from foreclosure when he would not other property. Unless there is a decided advance in the value of land in the vicinity of the property mortgaged, the mortgagor should aim to reduce the amount of the mortgage at maturity by making a part payment at least, since property naturally deteriorates with time, and at the end of three or five years the property may not be as good security for the debt as it was originally.

Real estate mortgage notes are usually made payable to the order of the maker and are then endorsed by him in blank. This makes the security transferable by mere delivery, and hence the holder of a mortgage may sell it, and an investor purchase it, the same as any other chattel. The buyer must of course, exercise good judgment and proper care to see that the security is sufficient and the character of the property satisfactory before investing. By trusting to representations of brokers in regard to these vital points, instead of making a personal investigation, investors have been known to find later on that their money was paid for a comparatively worthless security.

As the country becomes more densely populated, and the unoccupied lands of the West are taken up, the farm lands in the great Mississippi Valley become more valuable and prices tend to advance. Mortgages upon good, productive farms in the central west are therefore growing in popularity and more and more absorbing the capital of investors. Paper resting upon landed security in the newer and rapidly developing sections of the West, where farming is uniformly successful is almost sure to be good. But

**Farm
Mortgages**

like city mortgages farm securities must be carefully investigated or disaster may result. There have been mortgage companies located in western cities whose business consisted in making loans on farms and selling the securities to eastern investors. In some instances these companies guaranteed the paper. But as the loan company used the same money over and over again to make the loans, it is apparent that their guaranties would soon exceed the amount of their capital and hence become practically worthless. One objection to farm loans is the uncertainty of payment of interest in case of a crop failure. What an investor wants is not only safety of principal, but regularity as to payment of interest. A locality where there is a diversity of crops is preferable for desirable mortgages, since in case there should be a failure of one crop, the mortgagor may yet be able to pay his interest from other products. Where a single crop is depended upon, or the land is situated so that it is subject to overflow, resulting in an occasional total failure of crop, the mortgagor may be compelled to default in the interest perhaps for a year.

Then again, investors would do well always to consider the disposition and ability of debtors to pay. No matter how good the security, the mortgagor's credit has an important bearing upon the value of his paper as security for money loaned or invested. Where public officials repudiate their just obligations and the laws are framed in the interest of the debtor class, investors may well beware. As previously noticed, several of our states have openly violated their obligations, and hostile laws have been passed against capital by both state and municipal governments. It can hardly be expected that private citizens will prove to be shining examples of integrity when those in authority above them are thus derelict. Investors, therefore, aim to avoid such localities.

**Disposition
to Pay**

COMMERCIAL CREDITS.

CHAPTER XXXVI.

OUR CREDIT SYSTEM.

ASSETS; LOSSES; LIMIT OF CREDIT; MACHINERY OF CREDIT.

The wonderful commercial progress and development of this country during the past century has astonished the old world and amazed even ourselves. In looking about for the moving causes which have produced this great result, we must ascribe a large part to our credit system, extending as it does, to every nook and corner of the land. In no country in the world is credit so easily obtained and so extensively used as in the United States. Capital goes out freely and willingly and takes its chances in all manner of enterprises, so long as they offer fair prospects of returns on the investment. Thus the American people are educated in the use of credit, and have learned to depend upon it, until it has

Our Credit System

become closely interwoven with our commercial system. In European countries credit is more or less restricted. In Italy and Spain little credit is extended, and accordingly we see a languishing commerce. In Western Europe it is more widely used and commerce shows corresponding vigor and activity. The use of credit is not alone confined to the purchase or sale of goods on time or borrowing or lending money, but extends to innumerable acts of trust and confidence by which the machinery of the business world is kept in successful operation. A borrows money at his bank and the amount is placed to his credit. He owes B and gives a check in payment. The check is deposited in B's bank and passes through the clearing house, where it is offset by some other check of like amount, and as a result the credit is trans-

ferred from the account of A to that of B. No money or actual cash is handled in the transaction, but merely a transfer of credit. It is one incident in our credit system. Our clearing houses, stock exchanges and produce markets are all conducted on the same principle—one debt being set off against another, and a small percentage of the transaction actually liquidated in cash. All of our large corporations and their gigantic operations of both a public and private character are possible only through the medium of our credit system. Our whole commercial fabric rests upon it.

Since our credit system forms such an important factor in the problem of business management, it becomes necessary to understand and carefully use it. Losses are imperative under a credit system, and the aim must be to more than recoup for the loss by an increased volume of business. Losses in business are largely the result of carelessness, inexperience and a lack of proper system and discipline on the part of business men, or a lack of knowledge and judgment in giving credit.

**Losses
Inevitable**

An experienced credit man is responsible for the assertion that "we have only to take the average business house for the last twenty years and figure up the losses sustained by it and compare the sum total, plus compound interest, with its present financial status, and we shall find that it has lost more than the capital accumulated during the period."

A lack of a prompt and effective credit department where collections are looked after carefully and thoroughly, is sure to result in a stream of losses to the house, with possible failure in the end. So extensive has the use of credit become that large commercial houses have legal departments in connection with their credit departments kept busy with the collection of accounts of delinquent customers. Often the most energetic action is necessary to obtain assets in advance of the sheriff or assignee.

From Dun's Review, New York, we have the following:

TABLE OF FAILURES IN THE UNITED STATES,
1898 TO 1907.

Year	Number of Concerns in Business.	Number of Failures.	Amount of Liabilities.	Average Liabili- ties.	Per Cent Failed.
1898....	1,105,830	12,186	130,662,899	10,722	1.10%
1899....	1,147,595	9,337	90,879,889	9,733	.81%
1900....	1,174,300	10,774	138,495,673	12,854	.92%
1901....	1,219,242	11,002	113,092,376	10,279	.90%
1902....	1,253,172	11,615	117,476,769	10,114	.93%
1903....	1,281,481	12,069	155,444,185	12,879	1.12%
1904....	1,320,172	12,199	144,202,311	11,820	1.92%
1905....	1,357,455	11,520	102,676,172	8,913	.85%
1906....	1,392,949	10,682	119,201,515	11,159	.77%
1907....	1,418,075	11,725	197,385,225	16,834	.82%
Average,	1,267,027	11,311	130,951,701	11,531	1.01%

The period of time covered by this table may be taken as fairly representative of the average working of our credit system. Out of 1,267,027 mercantile and manufacturing firms, corporations and individuals doing business during the period, as shown by the table, 11,311 failed, or one in every one hundred and twelve. Innumerable petty failures consisting of those whose capital is too small for a rating, are not included in these figures. The average total liabilities of the concerns failing are, in round numbers, \$130,000,000. This is not a total loss, as a portion will eventually be paid. We may safely assume that not more than thirty per cent. will be paid, leaving a net loss to creditors of about \$91,000,000 in each year. This makes no account of the injury to trade consequent upon having such a large amount of assets tied up in litigation or pending settlement. Since thirty per cent. of the liabilities are realized in cash, after the expenses of conversion of the assets, shrinkage, etc., it follows that the

Shrinkage of
Assets

assets of the firms whose failures amount to \$130,000,000, as above stated, probably amounted to one-half or two-thirds the liabilities, or, say, sixty-five to eighty-six millions. The percentage of loss can only be ascertained by knowing the amount of business done. Business houses usually compute the rate of loss upon the volume of business transacted and not upon the amount of their capital, and since the capital of a concern is usually turned over several times in a year, the volume of business may be four or five times the capital invested. Without knowing the volume of business done, or the capital invested in mercantile and manufacturing enterprises, it is, therefore, impossible to arrive at the percentage of losses under our credit system, but it is apparent that, beneficial as the system is, we are doing a large amount of business not only for no profit, but at a loss of capital. It is true that within certain limits the merchant adds his percentage of losses to his selling prices, and thus the customer who pays makes good the loss occasioned by those who do not pay, but competition is constantly tending to keep prices uniform, and the merchant who makes the least of bad debts comes the nearest to a successful career, provided the volume of his business is not restricted by too much caution.

To what extent credit may be extended to a buyer in any given case is a problem depending upon a combination of factors. Outside of the capital invested, assets and liabilities, is the character of the individual, the conditions surrounding his enterprise which make it a success or failure, his experience, etc., all of which must be carefully weighed by the credit man before arriving at a decision. Mr. P. R. Earling, in his book entitled "Whom to Trust," says: "On the supposition, justified by experience, that the assets of a mercantile firm, **Limit of Credit** in the event of foreclosure or assignee's sale, do not bring over 65 per cent., the limit of credit, to insure us dollar for dollar, must be fixed at 65 per cent. of the inventory of the assets. In the case we have assumed, \$10,000

assets would pay liabilities of \$6,500, and this amount must be established as the limit, and in all cases this relative proportion should be maintained."

The nature of the assets should be considered, however, as this may vary the amount of shrinkage greatly. If the assets consist largely of staple merchandise and secured notes or accounts, the shrinkage may be comparatively small, especially if the market for such goods or products is an advancing one. On the other hand, old goods and stale accounts are subject to a fearful shrinkage when an attempt is made to convert them into cash.

Written and signed statements of assets and liabilities are now exacted of customers applying for any considerable amount of credit, by wholesale houses and banks, thus placing the facts in such form that in cases of misrepresentation the person signing the statement may be punished for fraud in "obtaining goods by false pretenses." Buyers may intend to be honest in their statements, but are frequently optimistic and inclined to overestimate their resources and ability to pay. The written statement tends to reduce the problem of "facts and figures,"

and dispel illusions. It is also customary to request references in order to ascertain how a firm stands in the estimation of others, but these are of much or little value, according to the motive of the writers. A jealous desire to injure a rival may cause an unfavorable report, or a disinclination to injure a friend may be the motive for a half favorable reply concerning an undesirable customer. Banks are constantly asked concerning the financial standing of their customers, but it should be remembered that a man often keeps faith with his banker when he stands poorly elsewhere, and thus the banker's opinion may not be accurate.

Commercial agencies greatly facilitate credits by furnishing information concerning the financial status of business firms and individuals. This information is collected in a variety of

Written
Statements

ways, by special reporters, lawyers and others, and supplied confidentially to subscribers. In this era of extensive and varied uses of the credit system, a systematic method of collecting information concerning firms and furnishing it to those who are properly entitled to receive it, is of immense advantage. In addition to quarterly and semi-annually revised reference books

**Mercantile
Agencies**

the mercantile agencies undertake to furnish their subscribers with special reports, consisting of detailed statements of facts concerning the financial status of every dealer of any consequence in the country. The mercantile agency also takes cognizance of mortgages, judgments and transfers of property upon the county records, and preserves the facts concerning them upon the agency's records. They endeavor to get "Signed Statements" of assets and liabilities from the debtor class whenever possible, and thus a mercantile report, made up from a variety of sources, is of great advantage to every dispenser of credit, especially as the courts have held that under certain circumstances a statement furnished a mercantile agency is as binding on the maker as if furnished a creditor direct. The reliability of these reports cannot always be depended upon strictly, but the prosperity of the companies engaged in that field of research is an evidence that the public has confidence in them.

The facts gathered by the mercantile agencies* are not public property, but are furnished under restrictions to subscribers to the agency only. It has been decided by the courts that the agencies are not responsible for inaccuracies of their statements, nor can they be prosecuted for libel on account of furnishing facts which may prove damaging to the business standing of a dealer. These institutions aim to verify all important facts before sending them out, and since no malice can be shown, in case of error, there is little room for litigation. The

*The principal mercantile agencies are R. G. Dun & Co. and Bradstreet's, although there are a number of lesser importance.

commercial agency is ever on the alert for every item of information which would seriously affect in an injurious way, the credit or financial standing of a dealer. The recording of a chattel mortgage, confession of a judgment, sale or other transfer of property, are noted, and in the case of an absconding debtor his whereabouts is frequently disclosed by the reporter or correspondent of the mercantile agency.

**Accuracy of
Reports**

In addition to the mercantile agencies we have credit associations in many of the different lines of trade, in which a large number of the firms and dealers are banded together for mutual protection. A bureau is created and the information required by members obtained by a clerk employed by the bureau. The main object of these associations is mutual aid in the matter of credits. Buyers who fail to meet their bills are prevented from obtaining credit from other houses, by having their past record brought to the attention of all members of the association, and thus by a variety of means, business firms aim to guard the expansion of credit, and permit its proper and conservative use.

**Credit
Associations**

The laws with reference to the collection of debts in different localities must also be considered when extending credit. In some states the laws are framed in a manner decidedly favorable to the debtor class. The exemptions are large enough to shield several thousand dollars worth of property, and the "laws delays" are more than necessarily numerous. Especially in the western frontier states where it is perhaps intended to attract settlers by favorable laws, thus giving the pioneer an advantage to offset the hardships which he must undergo, in opening up a new region, do we find the laws most favorable to the debtor. In the eastern and more populous states the laws are more equitable and judgment and execution can be more quickly obtained. Every successful credit man must be conversant to a limited extent, at least, with the laws of the states in which he does business.

**Collection
Laws**

In extending credit to a co-partnership some factors enter into the problem which do not appear in the case of a single individual. In order that a partnership may be successful in business it is essential that the different members of the firm should be harmonious in their ideas and actions. Discord is sure to lead to trouble and probable failure, or dissolution. "A house divided against itself cannot stand." The credit of an inharmonious co-partnership must necessarily be rated low, and the credit man must decide whether the partnership is one which combines the elements of success, and whether the firm is stronger or weaker than its individual members. It is an old adage in business life that one would do well to "avoid unfortunate men in your business affairs." If a firm is composed of several partners one of whom has hitherto been unsuccessful it diminishes the credit of the firm. We may sympathize with "an unfortunate man" but hesitate to credit him.

Partnership

Corporations have their advantages and their disadvantages. One of the latter is met with in obtaining credit. For old and well known houses whose credit is established, to incorporate in order to facilitate management of the business or the transfer of interests therein, is perfectly proper and wise, but in the case of new enterprises, the corporation labors under a decided disadvantage. The partners of a firm are severally liable for all debts of the firm to the fullest extent. They are bound during a lifetime, or until released by the statute of limitations, to pay the firm debts, but with a corporation, each shareholder is liable only to the amount of his stock.* Failure of the company cannot involve him beyond this. It is this feature, the non-liability of the individual mem-

Corporations

*Each shareholder is liable only to the amount of the par value of his stock, in most of the states, and cannot be proceeded against for corporate liabilities except in case the shares have not been fully paid, in which event the unpaid portion is collectible at law. In Ohio and a few other states shareholders are liable to twice the par value of their stock.

bers of the company, which makes the credit rating of a corporation lower than a partnership under the same conditions. There is no individual character in a corporation upon which credit may be based. It has no moral status. It is a "soulless" creature of the law, limited and bound by legal enactments. As a consequence it is entitled to a lower credit rating than a partnership. Banks and credit men frequently require the personal signature of a responsible officer of the company as a guaranty of its obligations.

PURCHASE AND SALE OF REAL ESTATE.

CHAPTER XXXVII.

LANDED PROPERTY.

TITLES; VALUES; NINETY-NINE YEAR LEASES; MORTGAGES.

Private ownership in land is a recognized right among all civilized governments and people. Titles are derived originally from the government,* which continues to be the paramount owner of the land under the doctrine of eminent domain, and which holds title to all unclaimed and undeveloped lands. The title to the lands in the United States was acquired from Great Britain by the treaty of peace, from France, Spain and other countries by either purchase or conquest. The title of the European nations to this immense territorial domain, which passed to the United States was founded upon their discovery and conquest. By the customary European law of nations discovery gave title to the soil subject to the right of occupancy

by the natives. The United States, therefore, de-

Titles

rived its title to all the lands within our borders,

subject to the right of occupancy or use by the

Indians. The millions of square miles of our vast undeveloped plains and forests were called government lands and this land the Government has parceled out and sold at the minimum price of \$1.25 per acre, or donated to individuals or corporations for various considerations.† The "chain of title" then begins with

*In a monarchical government they are derived from the king.

†Under the homestead law of 1862 a settler was permitted to acquire title to 160 acres of Government land gratis under certain restrictions by cultivating it five years.

the Government and runs down through the various holders who have taken it either through purchase or descent, to the present holder in fee simple, or claimant of the land.

The ownership of real property "in fee simple" excludes all qualifications and restrictions as to the persons who may inherit it as heirs, thus distinguishing it from a "fee tail." It is the largest possible estate a man can have, being absolute in perpetuity. It is where lands are given to a man and to his heirs absolutely without any restrictions or limitations put upon the estate. The word "simple" in the compound word "fee-simple" adds no meaning to the word "fee" standing by itself. The "fee tail" is an inheritable estate which can descend to certain classes of heirs only. It is necessary that they should be "heirs of the body" or "blood heirs." The theory of a "fee tail" estate was derived from the old Roman system restricting estates.

Having extinguished the Indian title by treaty or otherwise, the next step was to survey the land into ranges, townships and sections by means of lines running north and south, and east and west, but not including navigable streams or any land especially reserved, such as Indian Reservations and National Parks.

Surveys Townships are six miles square and contain thirty-six sections of six hundred and forty acres, each section being one mile square. These sections are divided into halves, quarters and eighths. The ranges, townships and sections are numbered in regular order, and hence by knowing the number of each we have a brief and accurate description of the tract. Salt springs and lead mines were specifically reserved to the United States, in all government land, our fathers probably supposing these constituted the only mineral wealth worth reserving. One section in every township, numbered sixteen, was reserved for the purposes of education.

When a town or village is laid out, all the land included within its limits is platted, upon a map, accurately drawn, which

is kept in the offices of the town or city. Anyone who owns land within the limits of the town or city may sub-divide it into lots by having it surveyed by a competent surveyor, which survey must be acknowledged by himself and the surveyor before a notary, and a true plat with such acknowledgment filed with the County Recorder. One who subdivides land usually names the

Subdivisions subdivision after himself and thereafter in describing any lot or parcel of the land the description must include, in addition to the number of the township, section, and part of section, the name of the subdivision, number of block and lot. A subdivision may be subdivided again and this is a re-subdivision, or a lot may be divided into two or more lots and these are called sub-lots. A legal description of a sub-lot may then read somewhat as follows: Sub-lot three of lot thirty in Brown's resubdivision of the south twenty acres of the East one-half of the West one-half of the Southwest quarter, section eight, township thirty-nine, range fourteen East of the Third Principal Meridian, Cook County, Illinois.

Land values depend upon innumerable conditions, and as the conditions change the values are liable to change also. Farming land is chiefly valuable on account of its fertility and other favorable conditions for raising produce, its nearness to market, transportation facilities, etc. City lots are dependent for their value chiefly upon location, those in the center of trade being the most valuable. As cities grow older and increase in business and population, the pressure for desirable lots in good locations grows heavier and prices advance. Improvements upon land, however, are constantly deteriorating from age and use and this acts as an offset in a degree against the advance in the land values. In large cities, for instance New York and Chicago, substantial improvements are frequently destroyed and modern ones of greater height erected. The invention of the modern "skyscraper" has made possible the

carrying up of buildings to practically an unlimited height, surpassing the renting space afforded in buildings of the old type and construction several fold, but not necessitating an increase in the size of the land. The cost of maintenance and the expense in the operation of these new buildings are proportionately less than in the old. All this, of course, has a tendency to greatly increase the land values of this character of property.

Values of property are largely determined by the rents or income, if it is improved, and, if unimproved, what income it may be made to produce. The stability of property also affects its value,—the question whether the conditions of location, etc., will warrant a continuation of income. This is determined by its accessibility to transportation, etc., the properties in centers of great population being of the highest value and receding in value from those centers as their accessibility becomes less. The law of supply and demand regulates to a large extent the value of real property the same as personal property. Property obtains an abnormal value frequently from overconfidence due from various causes, that are sometimes not warranted by the stability of the community or its industries. In growing towns and cities, all classes of real property are more or less in a transient state, changing as the character of localities change. Thus residence property deteriorates materially in the event of the removal of residents to new and popular locations. As a result properties sometimes a distance of eight or ten miles from centers of activity are more valuable than intermediate property. Business property then being the most staple and producing the greatest income, has, of course, the highest value, and being in demand is purchased to earn on the lowest percentage of income. Sometimes these properties are purchased to net the investor as low as four per cent. per annum.

The most desirable form of investment in property, and by far the safest, is to purchase land and then lease it for a long period, usually ninety-nine years, the lessee or lessees agreeing

to pay general taxes and all other obligations incurred by the ownership of the land, and in addition, as security for the payment of the rent and all additions thereto, erect an improvement on the property which he maintains during the life of the lease, said improvements reverting to the owner of the land at the termination of the lease by purchase, or otherwise, according to agreement. It is usually a beneficial arrangement also to the lessee, as it affords him all the rights of ownership of the land, providing, of course, that the ground rents and all the covenants of his lease are promptly met, without investing a large sum of money in the title. Long term leases of ground as previously stated, are usually made for the term of ninety-nine years. This is only a custom, following the old theory that a conveyance or letting of land for a period of more than three average life times, that is three life times of thirty-three years each, was an absolute conveyance and not a lease. Leases may just as properly and legally be made for one hundred years, or nine hundred years, or nine hundred and ninety-nine years as for ninety-nine years.

Having investigated the present condition and future prospects of a property and decided upon its purchase, the buyer enters into a written contract* with the seller, or his agent, in which the seller agrees to sell the property at an agreed price, to deliver a "merchantable" abstract showing a perfect title in him, and to convey the same by deed properly executed. On his part, the buyer agrees to buy or receive the property within a specified time, usually thirty days, after a complete abstract of title has been furnished him by the seller, showing perfect title in him, and to pay for the property the price agreed either in cash or installments as agreed. The buyer usually makes a cash deposit of about 5 per cent. of the purchase price when the contract is executed, which is to be

**Real Estate
Contract**

*All contracts with a reference to the purchase of real estate must be in writing in order to be valid.

refunded in case the transaction is not consummated through the fault of the seller, or is forfeited to the seller in case the buyer fails to carry out the agreement. If the transaction is consummated the contract money is applied upon the purchase price.

The seller then furnishes an abstract of title, which may be procured from an abstract company, showing the complete history of the ownership of the property to the present holder. This is examined by the buyer or his attorney.* Past conveyances, encumbrances, the rights of heirs, and especially minors, judgment creditors and many other points must be carefully watched and scrutinized in the past history of the property. So many questions of law are involved in the examination of titles to real estate that a good lawyer is a necessity. Defects in titles

**Examination
of Title**

may be cured in various ways, many of them by securing quit claim deeds from possible claimants by purchase or otherwise. Some defects are cured by time, while others are incurable. Properties sometimes lie unimproved and unsalable in our cities through some defect in title until lapse of time cures the fault. It is needless to say that the buyer should be absolutely safe in the quality of title which he accepts.

The next step is the execution and "passing of the papers" which convey title. On the part of the seller or grantor this consists of a warranty deed signed by him and the signature duly

**Passing of
Papers**

acknowledged by a notary. If the grantor is married, the wife, (or husband, as the case may be,) must join in the execution of the deed, and, if the grantor is a bachelor, or spinster, the fact must be recited in the deed. The buyer, or grantee, on his part pays the purchase money, or in case any portion of the purchase price is to be paid at future dates, he executes notes therefor, and a mortgage or trust deed on the property as security for their payment. The

*We have Guaranty Companies which issue policies of insurance against defects in titles, but the examination of the abstract is the most common method.

wife or husband of the grantee need not join in the execution of a mortgage or trust deed given to secure purchase money, but in all other cases where such instruments are executed she or he must so join.

As explained in a previous chapter, a mortgage is virtually a conveyance of property to the mortgagee, with a provisional clause that in case a certain note shall be paid upon a given date then the conveyance described in the mortgage shall be void and the title shall vest in the mortgagor. A deed of trust is a conveyance of property by the mortgagor to a third person called a trustee, to be held by him as security for the notes given. After

**Mortgage and
Trust Deed**

the notes are paid the trustee "releases" or reconveys the property to the grantor in the trust deed by the execution of a release deed. This

is the more common method of securing real estate notes. When there is a default in one note of a series or interest upon one of the notes, by a provision in the mortgage or trust deed such default causes all of the notes to fall due at once at the election of the trustee or legal owner of the notes. This is necessary in order that action may be taken under the mortgage or trust deed to enforce full and complete payment and avoid the necessity for foreclosure proceedings upon each note separately.

Mortgages are still used largely by insurance corporations in loaning their surplus capital, for the reason that they do not expect to transfer the paper and the mortgage gives publicity to the fact that they are the actual lenders of the money, but by individuals the trust deed form is preferred as it enables the owner to transfer the trust deed and notes without recourse or publicity, the actual lender not being known in the trust deed. In 1879 a law was passed in Illinois making the proceedings to foreclose a mortgage on real estate and a trust deed practically the same. Prior to that date it was not necessary for the mortgagee to file a bill of complaint, etc., it being only necessary for him to advertise the property a certain number of days and sell

it to the highest and best bidder. The law was no doubt enacted largely in the interest of the borrower, giving him a certain protection in the event of a fraudulent foreclosure, etc., and for the reason that a trust deed conveys the property absolutely under certain conditions and enables the paper to be more readily sold or used as collateral security for loans.

In foreclosing a trust deed or mortgage the complainant files a bill of complaint in the court having proper jurisdiction, making the signers of the notes and trust deed, and all parties having any interest in the property, defendants. The court usually refers the case to a Master in Chancery for the purpose of taking evidence and arriving at a conclusion as to the amount due. To this report either parties have a right to file and argue objections with the Master. In the event of the Master's report being favorable to the complainant and sustained by the court, a decree of sale is entered. The Master then advertises and sells the property to the highest and best bidder for cash. This being approved by the court the Master executes a certificate of sale to the purchaser, which certificate will entitle the purchaser or holder thereof to a deed at the expiration of the redemption period. This latter is one to two years in different states*,—a period of time in which the mortgagor may have a final opportunity to recover his property by paying up his debt with interest and costs.

During the continuance of the mortgage the owner of the property has what is called "an equity of redemption." He enjoys the same right of ownership over the property (assuming, of course, that interest and maturing notes are paid when due) as though the mortgage and trust deed did not exist. He has the right to transfer by deed, or to again mortgage the property, subject, of course, to the rights of the holder of the previous lien. In case the property is sold while it is under mortgage the purchaser either buys it "subject to" the mortgage, or "assumes and

*In Illinois the redemption period is fifteen months.

agrees to pay" the incumbrance. In this latter event, the purchaser of the property, by accepting such a deed, obligates himself personally to pay the incumbrance and in case of foreclosure, if the property does not sell for enough to pay the mortgage together with interest and costs, he may be held for the balance.

It is to the interest of the purchaser to see that the deed is properly placed on record in the office of the Recorder of Deeds. If the buyer fails to record his deed and the seller should fraudulently convey the property over again or mortgage it to an innocent person who placed his deed or mortgage upon record first, he, the innocent purchaser, would be protected in his title. The same principle holds in regard to recording other documents. The mortgagee must at once file his mortgage for record, lest another mortgage, sale or judgment takes precedence over it.

Recording

FIRE INSURANCE.

CHAPTER XXXVIII.

INDEMNITY FOR LOSS BY FIRE.

HISTORY; CLASSES OF COMPANIES; RISKS; RATES.

In the "Wealth of Nations" the author* expresses the philosophy and purpose of fire insurance in the following: "The trade of insurance gives great security to the fortunes of private people, and by dividing among a great many that loss which would ruin an individual makes it fall lightly and easily upon the whole society." Fire insurance makes commercial credit possible. Without it business would be restricted to a cash basis

and the future would be uncertain and unsafe.

Origin and
Object

Fire insurance became a necessity when people began to accumulate property of a destructible character. Prior to 1666, the only sort of indemnity obtainable against loss by fire was to be secured in membership in guilds or associations having for their object, or one of their objects, mutual relief in case of fire loss. The great fire of London, however, which raged continuously for four days from September 2, 1666, opened the eyes of the world to the possibility of loss by fire. Insurance by individuals, which is a common practice in England at this time, became a business. Companies were organized and one of them established in 1696 has survived the test of time and is in existence today. Primarily, these companies were organized to extinguish fires in property belonging to members, which property was ordinarily marked by a tin sign. Incidentally the company assumed the loss by fire. The

*Adam Smith.

“fire department” idea soon passed away, and the insurance feature only remains; and it has become an integral part of our modern commercial structure.

There are three kinds of insurance institutions: 1. Lloyds* or Individual Underwriters, 2. Mutual Companies and (3) Stock Companies. In the Lloyds system an individual, or a group of individuals acting each in an individual capacity through a common attorney, enter into a contract of insurance. The insurer known as the “Underwriter” in this case, personally receives the premium and pays the loss, and the contract is just as good as the man or the men back of it. The noticeable disadvantage of this plan of insurance is the necessity, in case of disagreement as to the amount of the loss, of bringing legal action against each one of the individual underwriters separately. It is also difficult to ascertain the present or future responsibility of the underwriters who are obliged neither to make statements nor to maintain reserves for unearned premiums or other liabilities. In England, this system of Lloyds or individual insurance has assumed large proportions and has attained a recognized standing commercially. In the United States the system is comparatively unknown. Whether it can adapt itself to our conditions successfully, is yet to be seen.

In the mutual company every member assumes a portion of every other members’ risk. The policy holders are the company. If a loss is sustained, the policy holders are assessed proportionately for the loss. Theoretically, this system of fire insurance should be workable; practically it has never been successful, except in a local or special way. Mutual fire companies confining their operations to localities where values are widely distributed, as in the case of farming

* The term Lloyds originated from a coffee house kept by Edward Lloyds in Tower street, London, about 1688, where merchants and ship-owners were accustomed to meet, and responsible individuals would assume risks, either severally or jointly, for a premium consideration.

communities, for instance, have lasted. It is also true that mutual fire companies, making a specialty of certain classes of isolated manufacturing properties have been successful. But the history of mutual fire companies, with the exceptions noted, has been unsatisfactory in the United States.

The stock company is the fire insurance company as we commonly know it. It is a corporation with a paid up capital. If conservatively conducted, it will also accumulate a considerable surplus for the conflagrations which are sure to come. This company files and publishes annually, statements of its condition. It is examined by the state periodically or on occasion, if an emergency arises. Its policies are of a standard prescribed by law, and its agents are licensed by the state in which they reside. The stock company is compelled by law to set aside a specified part of its premium income as "unearned premium." So far in the experience of this country, this system of insurance has appeared to be best adapted to our needs and most satisfactory for general purposes.

The legislatures of a number of the states have passed laws prescribing the kinds of policies that companies may use in those states. These are called standard policies. The so-called New York Standard Policy has been adopted in a large number of the states as the legal policy. In addition to this, many of the states have enacted statutes making it obligatory upon fire insurance companies to submit their books, vouchers and securities to the inspection of an examiner appointed by the governor of the state.

The consideration in an insurance policy is called the premium. The premium is calculated at so many dollars or cents per \$100 of insurance, which is known as the rate. For example, at \$1.50 rate, \$3,000 of insurance gives a premium of \$45. This is the annual premium. Policies for shorter periods than one year are written at what are called short rates. If the

annual rate is \$1.00, the short rate for one month would be 20 cents; for two months, 30 cents; for three months, 40 cents, etc., the rate for the period becoming relatively smaller as the period approaches one year. There is an established table of short rates showing the rate for every possible number of days in the 365, composing the year. On certain classes of property, term policies, or policies for longer than one year, can be secured. On residence property, it is the prevailing practice to write two-year policies for one and one-half annual rates, three-year policies for two annual rates, and five-year policies for three annual rates. The entire term premium must be paid in advance, but the saving effected by this plan of term insurance is considerable, and amounts to a large interest on the anticipated portion of the premium, as may be readily ascertained by an easy calculation.

The rate, which is the prime factor in the estimation of the insurer, may be determined in either one of two ways. First, it may be made arbitrarily upon the judgment of a competent and experienced person, after a personal examination of the property to be insured. Such rates are designated "flat rates," and until recently nearly all the fire insurance rates were "flat rates." The objections to such rates were that

Schedule Rates they were not susceptible of analysis or explanation, and being made by different persons or the same person under diverse influences, they were often more or less inconsistent. Most of the fire insurance rates in late years are the products of schedules. The schedule for frame buildings is a comparatively simple one. There being no special points of construction to be considered, the schedule has reference principally to the matters of occupancy and exposure.

The schedule for brick buildings is a more complicated affair. In this case there is a basis rate for a standard building not over a stated height and specified ground area. The figure set for this standard building is known as the "basis rate," and it is intended

to measure the sufficiency of the local water supply and fire protection, together with other conditions calculated to affect the general fire risk of the locality. To this basis rate

Basis Rate is added charges (made according to carefully prepared tables compiled from the best obtainable experience) for the following items entering into the fire risk. The items here given are from the schedule for brick mercantile buildings of ordinary construction in use at present in the City of Chicago, Illinois.

1st. Height. For each story over the standard height, a charge is made; this charge increases with the stories, because the difficulty of reaching and extinguishing a fire increases in proportion to the height of a building.

2d. Area. The risk of spreading fire increases directly as the area of the building and a charge is made for area, over standard, accordingly.

3d. Walls. To protect the building from adjoining buildings and to bear the weight of its contents, a building should have walls of certain strength, and deficiency in that respect is charged for in the schedule.

4th. Communications. An opening into an adjoining building makes possible the communication of a fire. If the communications are unprotected, the buildings are rated as one risk. If the communications are protected by proper iron doors, there is a charge made on the theory that the doors may not be shut in case of fire; this charge increases with the number of such communications.

5th. Exposures. Charge is made for exposure based upon the seriousness of such exposure, its nearness and the precautions taken to guard against the exposure.

6th. Elevator shafts. Unless built of non-combustible material with fire-proof doors at each floor, an elevator shaft acts as a flue to carry a fire to every floor in the building, and is heavily charged for under such circumstances.

7th. Floor openings. Stairs and other minor floor openings act much as an elevator shaft, though in less degree, and they are charged for accordingly.

8th. Condition. It is becoming more and more the practice in schedule rates to charge for unsafe condition of premises. These charges are intended to be temporary in their nature, and are supposed to measure the hazard existing by reason of poor condition of premises. As soon as the premises are put in safe condition the charge is removed. By reason of careless management, however, charges for condition often amount to a permanent charge, and become an unnecessary tax on the business.

Credits are allowed for protection intended to prevent the inception or the spread of a fire. Stand pipes with ladders on buildings, giving assistance to firemen, are the basis for a credit of one cent for each story. Automatic fire alarm service, or telephone watch service reporting to a central station is a large measure of protection, and for these a credit of ten per cent. of the building rate is ordinarily allowed.

Credits Special construction, such as open mill construction, and other superior construction, is encouraged by an allowance in the rate. Automatic sprinklers (a system of piping through a building with faucets which are opened by the melting of a fusible link, back of which are adequate water supplies in gravity or pressure tanks), afford the best protection known at this time against the spread of fire, and for this system of protection a very considerable credit is allowed in the insurance rate.

There are other charges and credits, but the ones cited will suffice to explain the theory on which the unoccupied building rate is constructed in the process of schedule rating. After the unoccupied building rate is ascertained, a charge is made for the occupancy, according to the hazard of such occupancy, and the result is the rate

Building Rate

at which the building insurance is written. Applying these principles for an example, we might find such a case as this:

"Basis rate" (4-story)	\$0.40
Height (6 stories) .....	.15
Area (5,000 ft. excess) .....	.10
Walls (deficient 2 stories) .....	.04
Communications (one protected) .....	.10
Exposure (frame—no shutters) .....	.15
Elevator Shaft (lath and plaster) .....	.10
Floor Openings (6) .....	.06

Gross unoccupied building rate.....	\$1.10
Credit for standpipe and ladder....	\$0.06
For automatic alarm (10 per cent.)..	.11 .17

Unoccupied building rate .....	.93
Occupancy—Crockery with packing.....	.10

Occupied building rate

Having ascertained the rate on the building (which in this case is made more than ordinarily complex, for the purpose of illustration) the next step is to calculate the rate on the contents. On the theory that any brick building is better than its contents, there is added to the occupied building rate a certain sum intended to measure the susceptibility of the contents to damage by fire or water. For example: Boots and shoes in cases would classify twenty-five cents more than the building. An open stock of dry goods, 50 cents; a millinery stock, 80 cents, and a stock of tobacco, \$1.00. Taking the crockery stock, for example, there would be added to \$1.03 (the occupied building rate) 45 cents for a crockery stock, making the rate on the contents, \$1.48 per \$100 of insurance per annum.

Rate on
Contents

If there is more than one tenant in the building, on the

theory that each additional occupant introduces some moral and physical hazard, there is a charge made, the amount of which charge is determined by the nature of the occupation. If a stock of merchandise occupies but one floor in a building, it is charged for location. The grade floor is standard, with no charge for location. In the basement, ten cents are added for liability to water damage, while above the first floor, the "loading"* for each floor is the square of the floor occupied. For example the loading for the second floor is four cents, the third floor nine cents and so on. The loading for stocks occupying more than one floor is obtained by striking an average for the floors occupied. When the entire building is occupied by a single concern no floor loading is made.

For buildings of fire-proof construction there is a "fire-proof schedule," designed to meet the different and complex conditions found in this important class of risks. Likewise for manufacturing risks, there are special schedules intended to measure the hazards existing in the different processes of manufacture with credits for safeguards calculated to eliminate or reduce such hazards.

*Loading is a term used for additions to the basis rate on account of location or other special conditions.

CHAPTER XXXIX.

FIRE INSURANCE—Continued.

BOARDS OF UNDERWRITERS; CO-INSURANCE; LOSSES.

Boards of Underwriters are associations composed of the representatives, managers or agents of insurance companies doing business within the state in which the association has jurisdiction. Such boards are either organized under the laws of the state, or are voluntary organizations for mutual benefit and protection.

It is the function of Boards of Underwriters to prepare and apply schedules for rating the risks located within their jurisdiction. At the present time, as schedule rating is little more than in its infancy, there are many inconsistencies in rates on similar risks in different localities. Gradually as the scheme of schedule rating develops, the comparisons of experience of different localities and the suggestions from central organizations of companies will equalize these inconsistencies and make the schedules more uniform. It will not be long before the merchant or manufacturer, who now has the satisfaction of knowing that his local competitors are rated under the same schedule as himself will have the added satisfaction of seeing his outside competition rated under a schedule so similar that it amounts to the same for all practical purposes. Nevertheless, it will always be true that certain classes of risks will be more profitable in one locality than in another. This, by reason of natural advantages and the absence of moral hazard, and this the fire insurance rate must always take into account. Absolute uniformity in schedules throughout a wide territory is hardly practicable on that account.

Board of
Underwriters

In addition to the business of making rates, the local board of underwriters has other and important duties to perform. Its corps of trained inspectors is constantly at work to reduce the local fire hazard by requests, failure to comply with which, after a reasonable time, subjects a risk to an increased rate for poor condition. The local board of underwriters stands also as the protector of the public water supplies, and it has not infrequently happened that boards of underwriters, in large cities, have brought about the separation of the fire department from politics. Intelligently administered, a local board of underwriters can be of large service in a public way.

With the exception of rates of insurance on residence property, practically all fire insurance rates are now based on an amount of insurance to be carried equal to 80 per cent. of the actual cash value of the property insured. This agreement, which is a special one written in the policies, is variously known as the "80 per cent. clause" or the "reduced rate agreement."

Its present use grew out of conditions such as this: One merchant with a stock valued at \$10,000 rating 1 per cent., insured his stock for \$4,000 at an annual premium of \$40, carrying the rest of his risk himself. Another merchant also with a stock valued at \$10,000 and a 1 per cent. rate would insure for \$8,000 and pay an annual premium of \$80. In case of a \$2,000 loss on each of these stocks, the companies would sustain a 50 per cent. loss on the first stock and a 25 per cent. loss on the second. That is, the companies would be obliged to pay \$2,000 on a \$4,000 policy in one case and \$2,000 on an \$8,000 in the other. In case of a \$4,000 loss on each stock, the loss to the companies would be total in the first case and 50 per cent. in the other. A plan of rating which permitted such inequality was certainly wrong. The merchant carrying 80 per cent. insurance in this case, was twice as good a risk to the companies as the merchant carrying 40 per cent. insurance, and it became evident that the

Co-Insurance

rate must be conditioned on some definite percentage of insurance to be carried. Eighty per cent. insurance was generally agreed upon as a fair requirement. Companies were quite willing that the property owner should be interested in his own risk, to the extent of taking the last 20 per cent. of fire risk, if he desired to do so. There is nothing in the 80 per cent. agreement, however, which prohibits a property owner from insuring 100 per cent. of his value, if he prefers. He may likewise, if he chooses, carry but 70 per cent. insurance, in which case he pays 10 per cent. additional rate, for the greater liability to the companies of a heavy loss. For 60 per cent. insurance, 20 per cent. penalty is added, and for 50 per cent. insurance, the penalty is 30 per cent. With less than 50 per cent of insurance, few companies would carry an ordinary risk.

Notwithstanding its general use, the 80 per cent. clause is widely misunderstood by intelligent business men, the common fallacy being that under this clause the companies agree to pay 80 per cent only of a loss. The actual operation of an 80 per cent. agreement, in case of a loss, can best be illustrated by examples: Suppose a stock, the cash value of which is \$20,000, requiring \$16,000 of insurance under the 80 per cent. agreement, should be partially destroyed. In the first example, let there be \$10,000 insurance, the companies pay ten-sixteenths and the owner loses six-sixteenths. In the second example, have \$12,000 insurance, companies pay twelve-sixteenths and owner loses four-sixteenths. In the third example, with \$14,000 of insurance, companies pay fourteen-sixteenths, owner loses two-sixteenths. In the fourth example, there is \$16,000 insurance. Here the conditions of the guaranty are complied with, and the companies pay all of the loss provided it does not exceed the face of the policy. If over 80 per cent. of insurance is carried, the guaranty is still fulfilled, and the companies pay the entire loss. In such a case, however, the loss would be spread over a larger amount of contributing insurance and fall lighter on each company, if there were more than one company.

It is desirable, on occasion, for an insurer to secure a policy covering property indefinitely located, as, for instance, covering merchandise, being received at and shipped from freight depots and docks. Or on rented pianos beyond the control of the owner.

**Floating
Insurance**

Or on merchandise being manufactured and in the hands of tailors or other artisans. In such cases, and they are numerous, it is usually possible to secure a "floating policy," covering anywhere, with some reasonable restriction as to the amount for which the company shall be liable in one fire, and a further provision as to the percentage of insurance to be carried. Such floating policies are usually at a relatively high rate, because of the uncertain and indefinite liability assumed by the company.

It is often convenient for a merchant occupying two or more buildings, or a manufacturer with a plant consisting of several buildings, to secure a policy covering stock in the several buildings or covering the entire manufacturing plant and its contents.

**Blanket
Policies**

This can ordinarily be done under what is termed "a blanket policy" which is written to cover the entire subject of the insurance in or on the several buildings. The rate for a blanket policy is arrived at by calculating the premium on the value in or on each specific building at its individual rate, and dividing the aggregate premium thus obtained by the total amount of insurance. The result would be the average rate.

An insurance contract is not, as some think, a "promise to pay" a specified sum in case of fire. Neither is it, as some would have it appear, a one-sided contract by which the company can avoid a legitimate claim. In the nature of the case an insurance

Contract

contract is drawn in general terms to be used in a variety of conditions, and it cannot have the directness or brevity of a single and ordinary contract between two parties. There are a few general features, however, of an insurance policy or contract, which, if known,

would assist greatly in a clear understanding of its terms, and do much toward the avoidance of possible differences. At the outset let it be understood that the insurance contract is personal. It insures somebody (not anybody) against loss by fire. Any change in ownership must be consented to by the company in writing. The subject of the insurance must be definitely set forth in the written portion of the contract. A policy on a stock of boots and shoes, for instance, does not cover groceries or dry goods. Any change in the character of the property insured should be immediately and fully endorsed in writing on the policy.

In lines 16 and 17 of the New York Standard Policy, it is stated that the entire policy shall be void "if the interest of the insured be other than unconditional and sole ownership," "unless otherwise provided by agreement endorsed hereon." Failure to conform to this provision of the contract is prolific of trouble. If the ownership is not sole and unconditional, the character of the ownership should be fully set forth. For illustration, if a building stands on leased ground, if the ownership of property is partial or contingent, if the property is incumbered or under contract, these facts should be clearly stated in the policy.

The policy also provides that any change in title or possession of the property will render the policy void unless consent of the Company is first obtained in writing. The object of this requirement is to place the Company in possession of all facts relative to each risk. If a change is made for any cause then the party insured should notify the Company through its local agent and obtain written consent to the change.

Unconditional Ownership If the party insured disposes of his interest in any property covered by a policy of insurance it is absolutely necessary that the policy should be assigned to the purchaser and consent of the Company obtained to the transfer or the policy will become void. A change from an individual

ownership to that of a copartnership, or to an incorporated company, or where one partner retires from a firm or a new partner is admitted to the firm, is a change of ownership of firm property and affects the insurance at once, making the policy void unless the company is notified and its consent obtained in writing.

In lines 39 to 44, inclusive, of the New York Standard Policy are set forth certain articles which are not insured unless specifically named:

“Unless liability is specifically assumed hereon, no loss to awnings, bullion, casts, curiosities, drawings, dies, implements, jewels, manuscripts, medals, models, patterns, pictures, scientific apparatus, signs, store or office furniture or fixtures, sculpture, tools; nor property held on storage or for repairs; nor, beyond the actual value destroyed by fire; nor loss occasioned by ordinance or law regulating construction or repair of buildings; nor by interruption of business, manufacturing processes, nor otherwise; nor for any greater proportion of the value of plate glass, frescoes, and decorations than that which this policy shall bear to the whole insurance on the building described.”

If any of these are to be insured, they must be incorporated in the written portion of the policy. With the exception of certain floating policies, already described, an insurance policy covers property “all while contained,” in a certain specified building or buildings. Any change of location therefore should be at once endorsed on the policy.

Lines 11 to 30 of the Standard Policy set forth certain conditions under which the policy is voided, unless consent is endorsed in writing. Generally stated (and excepting reference to title, already explained) these conditions are: The procurement of other insurance, the operation of a factory after 10 P. M. or ceasing to operate for more than ten consecutive days, any increase of hazard within the control or knowledge of the insured, the making of extraordinary alterations or repairs, the use

or storage of volatile products of petroleum or other explosive or highly inflammable substances, the vacancy or non-occupancy of a building for more than ten consecutive days. Permission for any of these may be obtained, in ordinary cases, on application to the agent of the company, which permission should be fully endorsed in writing on the policy. It should always be remembered that a fire insurance policy is a contract, subject to the general law of contracts, that usage does not nullify its conditions and that once voided, it can only be revived by the consent of both parties.

When it is desired to place a policy of fire insurance as collateral security with a bank, or with a mortgagee no written assignment is necessary, but in such cases the policy should contain a clause "loss, if any, payable to ——— as his interest may appear." This is the "loss payable clause" and is usually made in favor of the trustee of the trust deed securing the loan. This clause must be inserted by the company or its agent.

Among Insurance Companies it is the custom for some companies to issue a policy for a larger amount than they desire to carry themselves and in order to reduce their line on the risk they ask some other company or companies to re-insure their liability under the policy for a certain amount, and for this they pay the other company a consideration called the premium. The original insured has no claim on the re-insurance, his contract being with the company whose policy he holds.

Comparatively few policy holders sustain a fire loss. Otherwise the companies could not afford to issue \$1,000 policies at an average premium of about \$10. There must be a goodly percentage of "safe risks." Nevertheless there is but one way to transact fire insurance business, i. e., on the theory that there will be a loss and at once.

A fire insurance company conducting its business on any other theory would become insolvent and a merchant or manufacturer

who is careless, negligent or tardy about his fire insurance will very likely come to grief. It behooves a man to place insurance at once when the need for it arises, have the policy issued, examined, paid for and put away for safekeeping with the same care and promptness that marks his banking or other important business.

When a loss comes, there is a natural and regular order to pursue, attention to which will save time and expense to the insured and company alike. First, notify the company or its agent. Then set about diligently to protect the property from further loss. After doing this set out to carefully ascertain the amount of the loss. If the property is a building, have competent persons furnish an estimate of the cost of repairing the damage. If the property is personal, prepare a schedule, setting forth in one column the sound value, and in the other your opinion of the loss or damage. With specific information of this character in your possession you are in a position to negotiate with the company's adjuster intelligently and promptly. In case of disagreement with the company as to the amount of loss the policy provides for an appraisal by three competent and disinterested persons; one to be selected by the insured; one by the company, the two thus selected choosing the third. If the property is personal and totally consumed by fire, the value of a good set of books and a complete inventory cannot be overestimated.

LIFE INSURANCE.

CHAPTER XL.

INDEMNITY AGAINST MISFORTUNE.

HISTORY; METHODS; KINDS OF COMPANIES; KINDS OF POLICIES.

Life insurance is the combination of prudent men against misfortune. It is an invention of civilization and a practical application of the principle of co-operation, by which many contribute small sums to indemnify one, or his heirs

Definition against misfortune. Property may never burn, but every life must terminate, and hence the argument of prudence and safety applies even more forcibly in favor of life insurance than that of property. Nothing is more uncertain than the duration of human life, and yet the problem of this uncertainty has been reduced to a moral certainty by a long period of observations and classified statistics which form the basis of the business of life insurance.

The mathematical doctrine of probability was first enunciated by Pascal, the great French scholar, in 1654, and has since been elaborated by other writers. In 1671 De Witt applied it to the duration of human life. Gradually the death rate under definite conditions became established from carefully preserved

Law of Probabilities records. This result is known as the mortality tables. These tables represent the probability of death of various classes of persons under varying conditions, based upon past experience. Nothing is more reliable than the laws of average when applied to a large number of cases, and hence the business of life insurance is not specu-

lative, but capable of the most exact and conservative management.

Life insurance was unknown to the ancients. It originated in England early in the eighteenth century, but the first regularly organized company began business there in 1765. The early companies did not require a medical examination as a part of the application for insurance. The rates of premium were

History fixed by guesswork, and a board of directors passed upon the applications for insurance. The business of life insurance has grown to enormous proportions and to a greater extent in the United States than in any other country. In 1850 there were perhaps a dozen "old line" life insurance companies in existence in this country. Today we have about eighty companies with a total amount of insurance in force of over \$10,500,000,000, having assets of over \$2,100,000,000 and a surplus of over \$300,000,000.

Two methods of life insurance are employed. The first is where a fixed and uniform rate of premium is charged, known as the "level premium" plan, because of the uniformity of the premium charged throughout a given period. This class of insurance is usually carried on by regularly organized companies, either stock or mutual, and known as "old line" companies.

Two Methods The level premium plan provides for the payment to the company of more than the amount necessary to cover the risk during the early years of the policy, and the surplus thus accumulated is set aside as a reserve, or invested in securities, which, with interest will be sufficient to make up the deficiency in later years. The second method is known as "assessment" insurance in which each member of the association is required to make payments into the general fund for the settlement of death claims, as the needs of the association may require, or at stated intervals.

It is a well established rule that the insurer must have an insurable interest in the life to be insured for indemnity is the

fundamental idea in all insurance. Insurance without being coupled with an interest would be a species of gambling. An insurable interest, however, does not consist of the ties of relationship, nor dependence for support upon the life insured. In-

Insurance may be taken out upon the life of anyone whose death would cause financial loss to the beneficiary. In England and other European countries it is not unusual for business men to take out insurance on the life of their ruler to protect them from the financial loss that would be entailed by his death. Such insurance is procured without medical examination, or even the knowledge of the insured. In America this class of insurance is not written, but in every case it is necessary that the applicant should pass a medical examination and some companies require an investigation into the moral character and financial standing of the insured.

Life insurance companies are divided into two classes, viz: Stock and Mutual. A stock company is one which is owned by stockholders, the same as other corporations, who control its management and divide its profits. In some stock companies, however, the policy-holders are allowed a voice in the management, and in this respect they partake of the nature of mutual companies: Such companies may

be called "mixed." In a stock company ordinarily the policy holders have no share in the management of the company. A mutual company is one which is composed of policy holders who elect the directors of the company and participate in the earnings. The two kinds of companies, however, usually operate on the same general business methods. The mutual companies are the more numerous.

The method of insuring lives which naturally first suggested itself was to make the contract of insurance for a single year, and then renew or extend it from year to year, after the manner of fire or liability insurance, increasing the rate of premium as the risk increased. There is the more reason for short term con-

tracts in life insurance since the risk is constantly changing. The insured is growing older and may at any time develop symptoms of disease. Thus from birth to the age of 10 years the risk is constantly diminishing and then very slowly begins to increase until, after middle life, when it increases at a constantly accelerated ratio. On the other hand, a property risk may remain substantially the same from year to year.

The contract of insurance is based on the application on the part of the insured, containing his "warranties, promises, consents and agreements," together with statements of the company's medical examiner. The application of the assured, together with the payment of the premium, constitute the consideration upon which the company's obligation rests. On the part of the company, its agreement is evidenced by the policy of insurance. A great variety of covenants and conditions are embodied in such policies. The nature of these will be considered under the title "kinds of policies." In other branches of insurance, the companies may cancel the policy at any time by returning a pro-rata portion of the premium, but this is not so in the case of life insurance. A contract once entered into and

Contract of Insurance
Policy Cannot be Canceled

a risk assumed, is binding upon the company to the end of the term, unless cancelled by the consent of the insured. To rule otherwise would be a great injustice to the insured since it would leave him without insurance perhaps at a time in life when he could not procure it elsewhere.

Life insurance policies may be divided into four general classes, viz: Term, Life, Limited Life and Endowment. Any of these may be purchased by a single payment of premium, but the usual method is to pay the premium by annual or semi-annual installments.

Kinds of Policies

The formalities to be complied with are similar in all policy contracts—application, medical examination, etc. A term policy

merely provides insurance for a certain number of years, at the expiration of which it terminates and has no value. This is the oldest form of policy. A condition is sometimes inserted in a term policy providing that it may be renewed at an increased rate at the end of the period without a medical examination. Policies of this character are called "renewable term" policies.

Life policies provide for the payment of the face of the policy at the death of the insured, whenever that may occur. A whole life insurance is thus seen to be a term insurance for the duration of possible life. Ordinary life policies provide for the payment of premiums during the life of the insured.

Limited life policies are those in which it is provided that after a certain number of payments no further payment of premiums is necessary, and that the policy is fully paid up. The policy may then be held by the insured as an asset awaiting realization upon his death. The periods for the payment of premiums under such policies are usually 10, 15 or 20 years.

An endowment policy is one which provides that its face value shall be payable to the insured at the end of a fixed period (10, 15 or 20 years as the case may be) if he survives, or to the beneficiary if he dies within the period. This form of insurance was introduced later than the other usual forms. It was expected that it would be the means of inducing many persons to insure, who would not otherwise do so, in the hope of receiving the face of the policy during their lifetime. It especially appeals to those who desire to provide against need in old age. Apparently those who take endowment insurance are conscious of superior vitality, since the death rate among endowment policy holders is especially low.

While different companies have many variations and

designations for their different policy plans, each policy has as its foundation one of the above forms. Thus a "single premium" policy is one upon which the premium is paid in one amount when the policy is issued. Policies of this kind are written under both the life and endowment plans. Again, **Single Premium** an installment policy is one of the above forms of **Continuous** insurance providing that in case of death, instead of the face of the policy being payable in one sum, it is to be paid in a certain number of annual installments (usually twenty), or it may provide that a certain amount shall be paid yearly as long as the beneficiary lives, and should she die before twenty years has elapsed the balance of the twenty payments shall be payable to the beneficiary's estate. In that case it would be called a "continuous installment" policy.

Another form of insurance properly called an "installment-annuity" policy, provides that half the face of the policy shall be payable in twenty annual installments or forty semi-annual installments, the other half of the policy to be **Not a 5 % Bond** paid at the end of twenty years in one sum. Many companies give this form of insurance a name which is to some extent misleading, by calling it a 5% bond. They charge a higher premium per thousand and represent the face of the policy as being paid in twenty years. The twenty annual payments are called coupons, or interest payments. While this form of insurance is an excellent investment in certain cases, the term 5% bond is misleading in that people are induced to believe that they have an investment paying 5% interest.

Still another form of installment insurance is called a "survivorship annuity" policy. This policy provides that a certain amount shall be payable yearly to the beneficiary **Survivorship** as long as he or she lives, all payments stopping **Annuity** at his or her death. Should the beneficiary die **Policies** before the insured, the policy lapses. Some companies provide that the premiums shall revert to the insured in event of the

prior death of the beneficiary. This form of policy is designed to furnish protection to a wife or other dependent relative after the death of the insured who is the source of support.

A policy is sometimes issued upon the lives of two people, payable upon the death of the first. Such are called joint-life policies. They are sometimes taken by husband and wife, in favor of their children, or they may be payable to the survivor. More frequently they have been taken out by firms upon the joint lives of the partners, and payable to the surviving partner, thereby furnishing him with sufficient ready cash to buy out the deceased partners' interest in the business. For this reason it is commonly known as partnership insurance. To accomplish the same result, partners sometimes insure the lives of each other, thus making separate policies instead of joint life. On some accounts this is preferable to a joint-life policy, since in case of a dissolution of the firm the joint policy cannot be divided.

There are many firms and corporations whose prosperity is often dependent on the ability of its president or manager and the stock-holders would suffer heavy loss in case of his sudden death. This is especially true where a man of ability, but without large financial means is carrying on an extensive business on other people's money. Many such concerns carry enormous lines of insurance upon the life of the man through whom they have so much at stake.

A very few companies have a scheme which they attach to policies, providing that instead of the insured paying all of the premium, the company will loan him a portion of it each year at interest. The idea held out is that annual dividends will care for all or a large part of the loan.

This plan cannot be condemned too strongly, as it results in an unsatisfactory condition. If the insured pays the interest on these loans whose amount is increasing yearly, as more premiums fall due then he has a constantly decreasing

Joint Life

**Premium
Loan Plan**

amount of insurance at a rapidly increasing rate. But if both the loan and interest are allowed to accumulate, there is a more rapidly decreasing amount of insurance at the same rate. In either event when this kind of a proposition matures there is likely to be a very much dissatisfied policy holder.

A few companies issue what is called Industrial Insurance. This class of insurance is issued on all ages from one to seventy years, in policies ranging from very small amounts up to \$200 or \$300. The amount sold is almost marvelous. It is, of course, sold principally to people of very limited means.

Several companies insure women on exactly the same terms as men, others charge an extra premium or limit them to certain plans of insurance, while some companies do not insure women upon any terms.

CHAPTER XLI.

LIFE INSURANCE—Continued.

PREMIUMS; DIVIDENDS; LOANS; ANNUITIES; ASSESSMENT INSURANCE.

Premiums are payable on definite days and unless the policy provides otherwise, the payments must be made with absolute promptness. A grace of thirty days is allowed under some policies, and one month under others, after the first years' premiums are paid. The insured should distinguish between thirty days and one month in this case, as otherwise the policy may be allowed to lapse by failure to make payment on the proper day.

**Payment of
Premiums**

There are two principal ways of disposing of the profits in mutual companies arising under life insurance policies, viz:—annual dividends and accumulation of dividends.

An annual dividend policy is one in which the profits are payable in cash to the insured each year as they accrue. An accumulation policy is one in which the profits are allowed to accumulate for a given term of years usually for the length of time the policy has to run. When dividends are deferred for periods of five, ten, fifteen or twenty years, the option is usually given the insured to withdraw the accumulation in cash at that time or apply it to increase whatever form of surrender value is selected. Under accumulation dividend policies, no part of the profits already accumulated is paid in the event of withdrawal or death during the dividend period. Different companies have different designations for an accumulation policy, a few of which are "tontine," "semi-tontine," "deferred dividend" and "distribution" policies, all of which are based upon the same general principle.

Dividends

A favorite method of a few companies is to guarantee a certain dividend on a policy and call it a "guaranteed dividend" policy. Another plan of theirs is not to pay any dividends on a policy but to make a definite guarantee of a dividend payable at maturity of the policy. Such is called a "non-participating" policy, meaning that it does not participate in the profits of the company. A guaranteed dividend policy, unless it provides for additional dividends, is in reality also a non-participating policy.

As several elements go to make up the profits of a company, such as mortality, interest rates, lapses, expenses, etc., a life insurance company never makes a guarantee without a loading of the premiums for all contingencies. "Loading" is a certain allowance made and added to the premium in order to cover unexpected losses or expenses before making a guarantee. While guaranteed dividend and non-participating policies have their uses, it should be remembered that any results procured under either would have been received under a dividend paying policy and also usually a considerable amount of profits from the loading of the premiums which a company very seldom has use for, but for which every insurance company must make allowance in order to be perfectly sound and safe under all possible conditions.

While there is a great variance as to the wording of life insurance policies in reference to their restrictions and conditions there is almost as much difference in reference to the relative advantages in case of the lapse of a policy before its maturity.

Extended Insurance In many companies after a policy has been carried three years or more it has some value, provided the policy is surrendered to the company issuing it within a certain length of time. In some companies a policy would have a value, had only one annual premium been paid thereon.

Some companies provide, in case of lapse, for a paid-up policy for a smaller amount payable at death no matter when the

insured should die thereafter, while other companies have a provision that the policy shall run on for a certain period of time for its original amount of insurance, the length of the extended insurance of course being dependent upon the value of the policy at the time of its lapse. Some companies also provide cash values and loans in lieu of paid up or extended insurance. The policies of many companies provide that within a certain length of time a lapsed policy holder may be re-instated, provided he is in good health and pays back premiums with interest to the date of his re-instatement.

When a few years ago the privilege was given the insured of surrendering his policy in exchange for one of paid up insurance, it was called a "non-forfeiture" provision. And when upon failure to pay a premium the insurance is
Non-forfeiture extended by virtue of former payments, this is called "automatic non-forfeiture." Under a non-forfeiture policy it is now customary to permit the insured to resume the payment of premiums at any time before the value of the policy has become exhausted by lapse, the past due premiums and interest thereon being paid in cash or permitted to continue as a loan from the company.

The policies of many of the companies are now made incontestable after a limited period, and one great company issues a policy which is incontestable from the date of issue. Such policies were issued in England before they were
Incontestability introduced here, an extra premium being charged.

By this clause the company waives its right to contest the validity of the policy for any reason whatever, and yet it is a question whether, in case of fraud, the company would not have the right to contest.

The policies of many companies provide that after the insurance has been carried two, three or five years, according to the method of each particular company, the company will make liberal loans on the policies as collateral security, at a reasonable

rate of interest, usually 5%. Life insurance policies are also frequently used as security for loans from banks or brokers. Debtors are sometimes required by their creditors to take out insurance for the benefit of the latter, so that if the debtor should die, the debt will be provided for.

Life insurance policies may be assigned the same as any other valuable asset. Unless payable to the insured himself or his estate, the beneficiary must usually join in the assignment, but the policies of many companies are so written that the insured may change the beneficiary under the policy at will without her consent or knowledge. Of course the company must consent to the assignment.

The modern life insurance policies on limited payment life and endowment plans are so written, that in case the insured lives to the date of its maturity he will have a good investment. It must of course be understood that strictly investment insurance is written on an endowment plan. Take for illustration a 20-year endowment policy of \$1,000 which matures for a little over \$1,500 in cash at the end of 20 years, provided its profits will have been allowed to lie and accumulate. Such a policy will have made about 4% compound interest and furnished insurance for 20 years without cost.

Stringent laws in nearly all the states regulate the character of the investments of the policy holders' money and safe guard his rights in so many ways that it is practically impossible for an old line life insurance company to fail. Every company is forced each year to lay aside a sufficient sum of money which compounded at a given and very conservative rate of interest will be sufficient to pay any guarantees contained in its policies. For instance, in the case of an endowment policy the amount laid aside each year must be sufficient when compounded either at 3 of 4% interest according to the rate used to produce one

thousand dollars at the end of twenty years. The amount of assets is so enormous that the companies are able to hire the best financiers that are obtainable, each a specialist in his line, to handle and manage their vast interests. These men have a knowledge of how and where to invest money that the poor man or the man in moderate circumstances has no means of knowing. Insurance provides a way whereby the poor man can invest fifty or a hundred dollars a year to as good an advantage as the wealthy. It must not be assumed, however, that those in moderate circumstances are the only ones who invest in life insurance from either an investment or from an insurance standpoint, as our best and wealthiest business men are found to be the heaviest carriers of insurance.

Originally when one failed to pay the premium promptly on the day it was due he divested himself of all rights and equities under his policy. Under the level premium plan, it must be remembered that the insured pays a higher rate during the first part of the term than the insurance actually costs in order to counterbalance any deficit which may arise in case

**Surrender
Values**

he should live to an old age. Now if for any reason the policy is allowed to lapse, it is apparent that the insured has overpaid the cost of insurance.

Out of this condition has grown the doctrine of the surrender values of life policies. In 1861 a law was enacted in Massachusetts called the "non forfeiture" law, requiring all companies to give extended insurance as a compensation to the insured in case of lapse of policies. About this time the New York Life Insurance Company introduced a policy of whole life insurance paid up in ten years and inserted the condition that it could be surrendered after being in force for two years, for paid up whole life insurance for as many tenths of the original amount as full years' premiums had been paid. Other companies adopted the policy of allowing liberal surrender values in the form of insurance. The next step was to make the surrender value payable

in cash and this came in 1880. Most policies, after being in force for a period may now be surrendered for paid up insurance, for a cash value or for a life or temporary annuity.

As previously stated, many policies now provide that at their maturity the insured may take an income for life instead of taking cash or paid up insurance. In England and some parts of continental Europe, the custom of purchasing annuities has been in existence for a very long time. In America; however,

the custom has begun to grow only within a comparatively short time. An annuity is usually purchased by the payment of a lump sum to a life

Annuities

insurance company. The company issues a contract to pay a certain amount yearly to the annuitant as long as he or she may live, the annuity stopping at the annuitant's death. An annuity is also issued with the provision that if the annuitant dies before receiving the amount of his or her original payment back, the insured balance would be payable to the annuitant's estate.

A large amount of insurance in this country is supplied by fraternal or assessment associations upon the plan of assessing all survivors pro rata in case of the death of a member. The success of this plan depends upon keeping the association supplied with constant accessions of new members who are young in years in order that as the policy holders attain greater

maturity of years the average death rate may not be increased so as to cause an increase in the frequency of the assessments. For if the death

Assessment Insurance

rate increases the effect is to drive out the young members, prevent young and healthy lives from coming into the association and leave only the old and decrepit members who are unable by reason of their advanced years to obtain insurance elsewhere. Some of these fraternal associations are now accumulating a reserve, while others have adopted the plan of a graded assessment, increasing as the insured advances in years, in order to meet the increasing death rate.

THE STOCK EXCHANGE.

CHAPTER XLII.

DEALING IN SECURITIES.

INCOMES; INVESTMENTS; SPECULATION; GAMBLING IN STOCKS.

From the time when the first company was formed and its capital represented by shares, which were offered to the public, or the first responsible government issued its obligations in the form of bonds or promises to pay, the buying and selling of such securities may be said to have existed. Dealing in such forms of wealth is as natural, proper and legitimate as dealing in dry goods, or any other class of property. From buying and selling securities for the purpose of investment, it was only a step to the period of speculation in them. When the prospects of large gains made shares desirable, as in the case of the East India Company, the South Sea Company or Law's Mississippi Company, the price rose and speculation was active. When a time of commercial depression prevailed, or frequent and prolonged wars and internal strife, unsettled or overturned governments, destroyed commerce and made obligations unsafe, trading in securities naturally declined or ceased altogether. But as society advanced, and governments became more stable, with rights of property secure, companies began to multiply, and as securities increased, speculation became more common until, like every other employment, it became the principal or sole trade or occupation of a particular class of citizens.

In his History of England, Macaulay says: "It was about the year 1688, that the word 'stock-jobber' was first heard in Lon-

don. In the short space of four years a crowd of companies, every one of which confidently held out to subscribers the hope of immense gain, sprang into existence. Extensive combinations were formed and monstrous fables were circulated for the purpose of raising or depressing the price of shares." The

London Stock Exchange mania for speculation increased until in 1697 Parliament passed an Act to regulate the business of
Paris Bourse speculation in stocks. In 1773 the London Stock Exchange was organized and now occupies an old-fashioned building in Capel Court, opposite the Bank of England. It has a membership of nearly 5,000, with an entrance fee requirement of 250 guineas. Its scope is broader than any other exchange, since its location at the world's financial center gives it a pre-eminence. Stocks in companies scattered all over the world are traded in, American, South African, and Australian stocks being especially numerous and prominent. It is the international market for stocks, and bears the same relation to the world of securities that the Bank of England holds to the financial world. The Bourse, the great stock market of Paris, was founded in 1726. Its operations embrace chiefly European securities. Its agents are not allowed to trade on their own account.

The great trading center of America is Wall Street, in and near which are grouped the financial interests which in a large measure support the New York Stock Exchange. Securities from all parts of the United States are here listed and dealt in. There are stock exchanges in Boston, Chicago, St. Louis and other cities, but they possess chiefly a local character, being limited almost wholly to the securities in their respective localities. Each exchange has its rules and methods of doing business, but in a general way, they are similar and all are patterned more or less closely after the New York Stock Exchange. Many brokers in these cities are also members of the New York Stock Exchange, and

**New York
Stock
Exchange**

through this connection are enabled to execute orders for securities not listed in their local exchanges. The membership of the New York Stock Exchange is limited to 1100 and the price of a membership or "seat" is very high, ranging from \$30,000 to \$80,000, depending upon the general condition of the speculative market.

Widely different opinions prevail regarding the stock exchange. It has been condemned as a gambling institution, which unsettles values and injures legitimate business, and on the other hand, it has been praised as a necessary and commendable institution. Both of these opinions are, in a measure, right, and both are partially wrong. As a market for securities the Stock Exchange is unobjectionable—is a great convenience to both buyers and sellers. Capitalists who do not wish to loan their money or invest in real estate may here buy securities which will produce a desired income, and others desiring to convert securities into ready money are brought into immediate communication with buyers through this instrumentality. The Stock Exchange provides a place for the investment of savings. Not every person can invest in land or mortgages. These are limited in quantity and besides are beyond the financial capacity of most of those with small savings. Corporations are now numerous, and securities,—both stocks and bonds—are so plentiful that they constitute the chief form of investments. Bonds and stocks of approved quality have the advantage over real estate of being easily hypothecated as collateral for loans, or converted into cash by sale. The Stock Exchange, therefore, in so far as it affords facilities for making legitimate investments, is an undoubted benefit to the business world, and an aid to the progress and development of the country. Were stocks and bonds not readily salable, investors would not buy them, and were this the case, great enterprises such as railroads, large manufacturing establishments, and the like could

**Different Views
Concerning
the Stock
Exchange**

**As a Place for
Investment**

not be constructed. In a recent treatise entitled "The Work of Wall Street," Mr. Sereno S. Pratt very aptly says:

"A stock market is an income market. It is a place where incomes are bought and sold. No one, it is true, goes to the Stock Exchange as he might to an insurance company, and, paying over the requisite amount of money, buys an annuity. Yet, essentially, the stock-market operation is the same. The stocks and bonds traded in on the Stock Exchange would be worthless unless they represented value, either present or prospective. Bonds and preferred stock generally represent fixed income. Common stocks represent speculative income,—that is, income that may vary from year to year, according to the earning capacity of the corporation issuing them. If a company has no income and no prospect of earning one, its securities are worth no more than so much waste paper. It is true that the stocks of an insolvent company are often quoted in the market, but their value consists in the control of the charter, the franchise, or some other privilege from which it is believed an income may sometime be derived. Several months ago a list of 48 non-dividend-paying stocks was published whose average market price was 41, but every one enjoyed the prospect, immediate or remote, of future dividends. There could be no stock market if there were no incomes. In Paris an investor will say to his broker, "Buy me enough rentes to pay me an income of, say, 50,000 francs a year." He goes into the market to buy, not rentes, but income. In New York the investor does not express himself so directly. He says to his broker, "Buy me \$500,000 of bonds." Now, what he is actually buying is not bonds, but the income the bonds will yield. Before placing the order he has calculated exactly what will be the income, taking into account the premium paid, the interest promised, and the duration of the bond. All investments are thus made on the income basis.

From an investment to a speculation is only a short step. A.

buys a share of stock or a bond, pays for it, and lays it aside in order to derive an income from it. That is an investment. B. buys a stock or bond and holds it, expecting a rise in its value, when he may sell it at a profit. That is a speculation. B.'s

Speculation transactions are perfectly legal, moral, and in every way legitimate. Every dealer in dry goods, groceries, or farm products, and a large proportion of those who buy land, buy with the expectation of selling again at a profit. Then again, one who buys property as an investment may find its market value so increased within even a very short time, that he concludes to turn his investment into a speculation, and sells, intending perhaps to buy another kind of property or investment. Thus we see by analysis, the operations of the investor, the merchant and the speculator are essentially the same in principle, and to condemn one is to condemn all.

Is speculation a benefit to the business world? Would the business world be benefited if speculation were entirely prohibited and all stock exchanges and produce markets either wiped out of existence or restricted to purely investment transactions? Radical and unthinking persons have declared emphatically an affirmative to this latter question. They have even introduced bills into legislative bodies for the abolishment of produce and stock exchanges. All advanced and progressive nations have their exchanges in which speculative transactions form a large part of the business done. By means of the trading, both speculative and for investment purposes, these exchanges act as balance wheels upon prices. When prices advance, holders begin to sell, and when prices fall abnormally low, buyers are attracted, and their purchases tend to raise the market price to its normal condition. Thus extreme fluctuations are in a measure prevented by speculation.* Then again, the experienced speculator having a prophetic

**Is Speculation
a Benefit?**

*This law is trodden under foot, when in the case of a "corner" a single individual or a coterie of operators temporarily buy up and control a particular commodity and force its price up abnormally.

vision, may see in the future a season of favorable conditions which will increase the market value of stocks. Accordingly, he buys now, thus raising, in a measure, present prices, and in the future he sells, his sale tending to supply the demand, and lower prices. His mission then as a speculator has been a benefit to others. Henry Clews, before a Legislative Committee in New York, said: "Speculation is a method of adjusting differences of opinion as to future values, whether of products or of stocks. It regulates production by instantly advancing prices when there is a scarcity, thereby stimulating production, and by depressing prices when there is an overproduction."

Speculators usually buy on a margin. Instead of paying for the stock in full, they virtually buy the stock on credit, leave it in the broker's possession, and pay enough cash on the purchase to cover any possibility of a loss to the broker. Thus instead of buying fifty shares of stock at \$100 each and paying \$5,000 for it in full, the buyer pays down, say \$10 on each share, or 10 per cent. of the par value as a margin, and is thus able to buy ten times as much, with a corresponding increase in profit if the market proves favorable. Since he expects to soon sell the stock, it is not essential that he should buy wholly for cash. Nevertheless, it is an actual sale, and delivery of the stock to him is contemplated unless he otherwise disposes of it before delivery.

**Buying on
Margins**

The broker charges interest on the unpaid balance of the purchase money. Were buyers required to pay in full for all stock purchased, their transactions would be restricted to a comparatively small volume. They have the same moral right to use the credit system, as the retailer who buys of the wholesaler and pays part of the purchase price, the balance, perhaps, to be paid after a portion of the goods have been sold; or as the buyer of real estate who makes his first payment and sells the property before the next payment falls due. It is true the buyer on a margin takes a greater risk than either of these, for his purchase is larger in proportion to his capital

invested, and if the market should go against him, he might lose his entire investment. But he is a buyer on credit, the only difference being that a greater degree of credit is extended to him on account of the custody of the property remaining with the broker as security.

There is a point, however, where speculation degenerates into gambling. The feverish desire for sudden riches, and the fascination that attends the uncertainty of speculative operations, often lead men away from strictly legitimate transactions and they become reckless,—mere gamblers upon the turn of the market. The speculator is one who studies the condition of finance and trade, both present and future, with especial reference to their effect upon the stock market, and bases his action upon well drawn and conservative conclusions, shaping his course so as to

Gambling in Stocks

meet conditions of the money market as he anticipates them. He exercises the same judgment and discrimination that a wholesale merchant or banker employs in the conduct of his business. The gambler in stocks, on the contrary, makes no calculations, but “goes it blind,” buying and selling merely on his impulse, and “trusting to luck” for the result. His operations are not based upon a study of the future, but upon “tips.” He makes no effort to control or meet future conditions. In short, he does not differ, so far as the intent is concerned, from one who puts money on a horse race or a throw of dice. No wonder such operators almost universally “go broke” sooner or later.

Since the intrinsic value* of any given bond or stock remains practically unchanged from day to day, or gradually increases in value according as the company is prosperous or otherwise, why should the market value fluctuate so rapidly and radically, on ‘Change, is a mystery to many persons. Some of the most stable

*Stocks and bonds have three values, viz.: par value, or nominal value; intrinsic value or real and inherent worth and market value, or what the stock or bond will bring when sold. These three values may be widely different.

and reliable stocks in well established companies, paying nearly uniform dividends from year to year, fluctuate in price on the market, to a surprising extent. Thus St. Paul railroad stock has been known to fluctuate \$50 a share within a few months, with little or no change in its real earnings. A stock which earns five per cent. frequently sells for less than one which is earning four. This seeming inconsistency can only be explained as one of the results of speculation and the manipulations of the market by shrewd operators. Mr. S. S. Pratt, in illustrating this feature of the stock market, says: "A man owns a house from which he derives a net income of \$1,000. The house is worth, say, \$20,000, and the income of \$1,000 is 5 per cent. on the investment. But if he had to sell the house quickly he might not find a ready purchaser, and would have to sacrifice the property, say, for \$10,000. There has been no change in the actual worth of the house. It is in as good condition as before, and the income continues, but the price is 50 per cent. of its true value. Or, the owner of the property may find that a corporation wants it for some important purpose, and is willing to pay a big price for immediate possession. In this case an urgent demand has advanced the price, although there has been no change in income. Let us carry the illustration further. Suppose the corporation wants the property, but wants it cheap, and is willing to wait a while for it. Thereupon it begins to manipulate the market for real estate in that vicinity. By various expedients it impresses the owner with the belief that the prices of property on the street are likely to decline, and that he had better sell for what he can get now, than wait and perhaps do worse."

Now, transfer the foregoing illustrations to the transactions on the stock market, and the reasons for many of the fluctuations in stocks will be apparent. The stock market is filled with shrewd men who study the present and future conditions of the market. They know in a general way, who hold certain stocks,

and they endeavor to create conditions which will affect the market in their favor,—enable them to buy cheaply or sell dearly. If they can create an impression that will depress the price of a given stock in future it tends to depress it now. Sometimes they sell stocks to create the impression that they are “unloading” on account of an expected fall in price, while at the same time they are buying the same stocks secretly through another broker, taking care to buy more than they are selling. Just how far deception in stock manipulation can be carried without becoming dishonesty is difficult to determine, but open lying, such as spreading a false or malicious rumor in order to affect the market is considered disreputable, and beneath any gentleman both on the stock, as well as produce markets. A “corner” is the extreme of manipulation, and consists in controlling practically all the stock of a kind, with the result of forcing those who are short to buy the stock at a fictitious price in order to fill their contracts.

CHAPTER XLIII.

THE STOCK EXCHANGE. (Continued.)

BROKER; BULLS AND BEARS; LISTING SECURITIES.

The stock broker acts as the middleman in negotiating contracts between buyer and seller, but in a legal sense is the agent of only one party to the transaction. Since the trader must rely very largely upon the advice of his broker, it becomes of first importance that the broker should be a cool-headed man, whose judgment concerning all matters relating to the stock market

The Stock Broker

can be taken as accurate. The broker is supposed to keep himself thoroughly posted as to passing events in the financial and commercial world, both

at home and abroad. His view must be a comprehensive one, and he must be able to recommend a wise course of action for his client, based upon his mature judgment of the future. The established brokerage charge is one-eighth of one per cent. upon the par value of the stock bought or sold, for either buying or selling, or one-fourth of one per cent. for what is called a "round trade," consisting in both buying and selling the stock. Some brokers do a strictly commission business, while others combine this with trading on their own account.

A "short" is one who has sold stock that he does not own, but which he hopes to buy, before time for delivery, at a price below that for which he sold. Since it is now to his advantage

Bulls and Bears

to depress the market in order that he may be able to fill his contracts at a lower price, he is a "bear" in the market, and his efforts are devoted to

"bearing" or pounding the price downward. When a "short" has been able to buy enough stock to fill his contracts he is said

to have "covered." If he finds himself unable to cover except at a loss, he may "liquidate," which consists in paying the difference to the other party. A "long" is exactly the opposite of a short,—one who has bought more stock than he had contracted to sell, and is therefore anxious that the market should advance, in order that he may dispose of his holdings at a profit. He is, therefore, interested in tossing the price upward by every means within his power, and hence is called a "bull." A "bull market" is one in which prices are advancing. A "bear" market is one in which prices are declining.

A "put" is the right which a broker has by contract to deliver to another a specified amount of a stock at an agreed price within a specified time. If the market declines, the broker who has a "put" may buy the stock and deliver it at a higher price, realizing the difference as a profit. A "call" is the right to demand, or call for a specified amount of stock at an agreed price, within a fixed time. The owner of a "call" is a bull. It is to his advantage to have the price advance, for then he may call his stock and sell it at an advance. A "spread" is a combination of a put and a call. The holder of a spread has the privilege of delivering the stock at one price or calling it at another. For the privilege of a put, call or spread, a fee is paid by the broker who buys it, varying in amount, according to the value of the privilege as estimated according to the condition and probabilities of the market.

Numerous terms in addition to those already mentioned have been coined especially for the stock market. A "point" is one per cent. in the price of a stock or bond. The market is "steady" when it holds its own, "firm" when it advances, and "weak" when it declines. A "pool" is a combination of operators acting together for a common end. A "blind pool" is one in which all the operators are kept in ignorance of its operations except the one person who manages it. The object to be attained is absolute secrecy. A

Puts
Calls
Spreads

Language
of the Stock
Market

"wash sale" is a fictitious transaction made by two or more members who act in collusion merely for the purpose of giving the appearance of a rise or fall in the price of a certain stock, or swelling the volume of its apparent sales and thus influencing others to buy or sell.

Listing securities consists in placing them upon the records of the stock exchange so that they may be traded in by members. Securities not thus recognized or listed cannot be the object of transactions upon the floor of the exchange. Listing stocks or bonds does not make the exchange a guarantor of their value,

but is an evidence of their genuineness. Buyers must judge for themselves the value of the securities which they purchase. By the operation of listing, however, the securities are required to pass an investigation which in a measure establishes their character as reliable, and thus to a certain extent protects the buyer. A corporation desiring to have its stock or bonds listed, must file a written statement with the Listing Committee of the Stock Exchange, setting forth the fullest details concerning the company and its securities,—its name, date and place of organization, authorized capital, amount of stock, preferred and common, amount actually paid in on the stock, amount of liability of stock holders, name and address of the Registrar, description of the assets of the company, detailed statement of the nature of the company's liabilities, gross and net earnings for the past year if the company has been in business that long, or a copy of the company's balance sheet for the previous year, also a description of the bonded indebtedness outstanding of the company, if any, names and addresses of the officers and directors, etc. Thus a full history of the past, and a description of the present condition of the company is placed on record with the Stock Exchange Committee, who, after due consideration, vote to refuse or admit the securities to the privilege of the Stock Exchange. With these safeguards thrown around the market, together with the re-

Listing
Securities

quirements usually added by the listing committee that a Trust Company shall act as trustee of the mortgage and registrar of the bonds, if bonds are to be floated, investors may deal in securities with a large degree of confidence and safety. Banks will accept listed securities as collateral more readily than others.

No one but members are allowed upon the floor of the exchange. All buying and selling, or agreements to buy and sell are made by oral contracts. The member making the offer specifies the number of shares, the fractional part of the price, (such as $\frac{3}{4}$ in case the quotation is 103 $\frac{3}{4}$) and the terms of the sale. When no amount of stock is named in an offer 100 shares of the par value of \$100 each is understood. The terms of the sale are either "cash," that is for delivery and payment upon the day of sale, "regular" that is, delivery and payment upon the next business day following the sale; "at three days," which is for delivery and payment upon the third day following the sale, or for "buyers option" or "sellers option," which is after three days and within 60 days after the date of making the contract, at the option of the party holding the privilege or option. Under this form of contract the buyer, or seller as the case may be, has the right to call for the consummation of the transaction at any time he chooses within the limit of sixty days.

Immediately after a transaction has been made between two members upon the floor of the exchange each is supposed to jot down a synopsis of it upon a small pad, which he carries for the purpose. From this imperfect record the entries are carried upon the books of the members and afterwards compared. It is very seldom that a member disputes his liability under the pad entry. If the stock is not delivered as per agreement, or not paid for upon delivery offered, the matter is reported to the proper officer of the exchange, who buys or sells the stock at the market price, in other words endeavors to carry out the agreement of the member who is in default, and whatever loss is

entailed thereby, or whatever the difference between the agreed price and the market price, the one party has a claim against the other for its recovery. Stocks sold "ex-dividend" do not carry the dividend to the purchaser. When the books of a corporation are closed and a dividend declared, the dividend no longer goes with the stock, but just prior to the declaration of another dividend, that dividend does go with the stock unless it is again sold ex-dividend.

As previously stated, with the exception of purchases made for the purposes of investment, the bulk of the business of buying and selling stocks and bonds is done upon margins. The buyer does not pay for the securities in full, but buys them largely upon credit, paying probably ten or twenty

Margins per cent. of their value to the broker as a margin to cover any possible adverse movement of the market. The broker furnishes the capital necessary to purchase the securities and charges his customer interest upon their cost, over and above the amount of the margin in his hands. Thus, suppose A. desires to buy stocks worth \$100,000. He deposits \$10,000 with his broker, together with instructions to buy the specified stock. The broker is merely the agent of the customer and must carry out his instructions. The broker may advise his customer as to the best course to pursue, and his advice is usually valuable, since it is founded upon intimate association with the stock market, but the customer issues the actual orders to buy or sell. The broker protects himself from loss through fluctuations in the market by requiring a sufficient margin to be deposited. The amount of the margin will vary according to the character of the stock. While ten per cent. is ample margin in the case of most stocks, a larger margin may be necessary in some cases, and of this the broker is the judge. In case the market fluctuates to the limit of the margin, the broker calls upon the customer for more margins. If the customer fails to respond, the broker sells the stock immediately in order to save himself from loss by a still further fluctuation.

Stocks or other securities purchased by a broker for his customer must be paid for on delivery. But the customer has placed only a margin of perhaps 10 per cent. of the cost of the securities in the broker's hands. The remainder of the purchase money the broker must, and does, furnish. Suppose a broker buys 1,000 shares of stock at 120, the whole amounting to \$120,000. The customer has deposited \$12,000 as margin. The broker must furnish the remaining \$108,000. Brokers are not rich men, and even if they were, they could not possibly furnish sufficient capital to buy all of the securities which a large brokerage business would require. The broker arranges with his bank for a loan large enough to supply the needed funds, the securities about to be purchased to be deposited as collateral. He extends credit to his customer and in turn gets credit from his bank. He extends a credit to his customer equal to, say 90 per cent. of the cost of the stock, and the bank extends a credit to him of, say 80 per cent. of the cost of the stock. Thus, the customer furnishes \$12,000 of the purchase price, the broker furnishes \$12,000 of his own capital, and the bank furnishes the remainder, \$96,000. But the securities are not yet delivered to the buyer, and the condition of their delivery is the simultaneous payment of the money. The matter is arranged in this way: The broker has an understanding with his banker that the bank will over-certify his check temporarily. After certification the check is passed over in exchange for the stock, which is then sent to the bank as collateral for a loan large enough to make the account good. It is true, however, that banks will not over-certify checks in this way unless the character and standing of the broker are such as to warrant implicit confidence in him. The broker must also carry a constant balance in the bank large enough to entitle him to such favors.

It will thus be seen that over-certification of checks is an absolute necessity in stock transactions under the custom of buy-

Over-Certifica-
tion of Checks

ing securities on credit or under the system of margins. A clause in the National Bank Act forbids the over-certification of checks by National banks, and on account of this restriction (and others) Trust Companies and private banks have been organized in considerable numbers to meet the public needs.

Call loans are a feature of stock trading, and are extensively made from day to day, subject to "sharp call," which means that upon notification from the bank, to the borrower, such loans shall be repaid before the close of banking hours of the same business day. These loans are secured by stock

Call Loans collateral, and when stock loans are terminated by such notification the debtor is very likely compelled to borrow other money in the open market, (which tends to advance the rate of interest on loans upon that particular security) or to sell such securities in the open market, which is apt to depress its market price, especially if it should become known to have been discredited as collateral by the trust companies.

In hundreds of offices in Chicago and other cities throughout the country may be seen little telegraphic instruments called "tickers," through which runs a narrow paper ribbon on which the instrument prints automatically the names

Tickers and prices of stocks and bonds in abbreviated forms. These tickers, together with the service

which they furnish, are rented to offices by the Western Union Telegraph Company, and as fast as sales are made on the New York Stock Exchange the telegraph conveys the information to the public by means of these instruments.*

*The same device is used for the produce exchanges.

THE PRODUCE EXCHANGE

CHAPTER XLIV.

BOARD OF TRADE.

CHARACTER; ORGANIZATION; MEMBERS; BENEFITS TO PUBLIC.

The United States has never, thus far, been a great manufacturing country. Its commerce and wealth are chiefly based upon the products of the soil. Its mining and lumbering interests have been small compared to its agriculture. It is the great food producing nation of the world. Europe is directly interested in the success of agriculture in the United States and is dependent largely upon American produce. The development of agricultural interests has been a potent factor in the growth and development of our cities. New Orleans became the greatest city of the south chiefly because the products of the cotton fields found their natural outlet there. Chicago had its growth in the fact that it is the center of a vast agricultural domain. Buffalo and other cities of the lower lakes assumed importance as the transportation of farm products by water to New England and the seaboard became a necessity. Later, Galveston in the far southwest, Minneapolis and Duluth in the northwest sprang up and became thriving cities because they were natural geographical outlets for agricultural products of the expanding and developing west. Agriculture has also been the moving incentive to the building of railway and steamship lines. It was to meet cargoes from the Illinois and Iowa prairies that the first railroad lines were pushed westward to the struggling

**Agricultural
Interests**

trading center at the foot of Lake Michigan,—afterwards to become the greatest grain market in the world.

The produce exchange is an outgrowth of our agricultural development. It is a carefully devised business system for handling, storing, and distributing annually millions of bushels of grain and millions of dollars worth of animal products in the form of meats, lard, etc., at important points

Definition in the United States. It is a grain and produce market, the creature of our necessities as an agricultural and commercial people. It differs from a stock exchange in that its members deal in realities, even though they handle nothing but warehouse receipts or promises to deliver, while the stock broker deals in the evidences of credit, or securities which may or may not have a tangible value back of them.

Produce exchanges are usually located in those cities which have important agricultural sections, tributary to them, where railroads center or where rail and water commerce have natural connections at a navigable port. The most im-

Location portant produce exchanges are therefore at the seaboard, on the lakes or on navigable rivers. On the Atlantic coast the exchanges are at Boston, New York, Philadelphia and Baltimore. On the Gulf of Mexico the principal exchange points are New Orleans and Galveston, and on the great lakes are Chicago, Milwaukee, Duluth, Detroit, Toledo and Buffalo. St. Louis, Kansas City, Cincinnati and Minneapolis are examples of exchanges in close touch with producing regions but not having advantages of lake or ocean navigation. San Francisco is the most representative exchange point on the Pacific coast. These cities furnish the natural outlet for the distribution of the products of their several sections.

Each exchange is a corporation controlled by a general or special charter under which its acts are legalized by the state in which it is located. It must be governed by certain officials elected from and by its members. These officials are usually a

president, one or more vice-presidents, a body of directors and various standing committees to attend to the details of official business. Each exchange adopts for itself rules and by-laws which govern both officials and members in all their acts. These rules prescribe the requirements of membership, the terms and conditions under which a member may transact business, and provide rigid methods of discipline for violations of the laws of the exchange. It must be kept in mind that the exchange, as such, transacts no business—of a commercial nature,—does not receive or ship, buy or sell during its existence a bushel of grain or a pound of produce of any kind. It simply furnishes the facilities for trading to its members and so hedges them about with restrictions that every contract made is binding under its rules and under the laws of the state and nation. Any digression from the strict letter of exchange law is promptly followed by a charge of uncommercial conduct and this by suspension, expulsion or other penalty.

The members of an exchange may be divided into several classes according to the special features of the business adopted. "Receivers" are those who make a business of receiving grain or other produce direct from the country shipper. Their business is to carry out the instructions of the shipper either in storing the grain in a warehouse or offering it for sale in the open market to the elevator owners who may wish to carry it to a future time, to the miller who may want wheat to grind, to the distiller, the brewer, the cereal company or perhaps the eastern shipper or exporter. "Shippers" are those who make it their business to arrange for the forwarding of grain to still other exchange points or to eastern distributors and consumers. "Carriers" give special attention to financing this class of property by supplying the necessary capital, furnishing storage, insurance and all needed protection until there is a demand for its ship-

Organisation of
the Exchange

Members and
their Privileges

ment. This class of business has given rise to extensive systems of private elevators. Public warehousemen are those who own or lease from railroads great storage houses the contents of which they generally do not own. They are required to issue warehouse receipts for all grain stored in such houses and the state, through a board of warehouse commissioners, regulates the storing, carrying and delivery of this grain to its owners who pay a fixed charge per bushel to the warehousemen for the warehouse service.

In the workings of the Produce Exchange no class of members occupy so prominent a place as Commission Merchants. As a rule they outnumber the grain receivers, the shippers, the elevator owners and the independent traders, who are without a commission business. Ordinarily the best class of commission merchants do not trade on their own account, but confine themselves to the proper execution of customers' orders. For the handling of a trade in grain there is established by each exchange a regular commission charge, usually $\frac{1}{2}$ ¢ a bushel for opening and closing the trade. The business is most profitable, when conducted on a large scale, the largest houses in the largest markets of the country frequently executing orders for many millions of bushels of wheat, corn and oats in a day. This presupposes a very extensive office force, a big private wire system reaching to other exchange points and a wide acquaintance backed by a most excellent reputation for handling all orders instantly and accurately. Where a few houses of this kind exist in a large trading center there are hundreds of smaller concerns doing a limited business, but under the same rules and restrictions of the exchange. The first province of the commission man is to execute orders in any or all markets on the exchange. He must know his customers, or the people who entrust him with orders. If he has not a personal acquaintance with his principal, (the man giving or sending the order,) he must have what is the

The Commission Merchant

equivalent of personal acquaintance and confidence—a financial guarantee from the principal.

This brings up the subject of margins or security on trades ordered. The favored commission house may have a number of customers whose financial prominence is such that they have *carte blanche* privileges at the order window. In such cases the commission merchant knows that whatever is bought or sold for such account is as “good as gold” without the scratch of a pen. This class of customers is the exception. For the ordinary trader the first step is to be properly presented to the head of the commission house as a reputable gentleman. The

Margins

second requisite is for him to deposit with the house such sum of money or certified checks as will cover ordinary obligations in the trade. Then his orders to buy or sell are carried out by the machinery of the fully equipped commission house. If his orders exceed in volume the credit he has with the house, the credit clerk is quick to notify him that more funds are needed. The rules of most exchanges permit the commission merchant, if any unusual action is taking place in the market, to call margins on trades to the extent of ten per cent. of the ruling value or price of the article bought or sold. As an example: The customer has wheat bought at 80 cents for a future month. Ten per cent. of this price is 8 cents. The commission man if he fears a bad break in the market may ask the trader to put up enough funds to protect the trade on a break of 8 cents or down to 72 cents. If the wheat is sold at 80 cents and the market looks so strong that it may make a big advance, the margin is called the other way,—the trader putting up the funds to protect the house on a possible upturn in price to 88 cents. When the market has covered half this ground a break of 75 cents or an advance to 84 cents, the commission man may again call for margins to the full limit above or below the ruling price. Thus, on a very excited market or during panicky conditions, margin calls on customers may come thick and fast.

The customer may feel that he can not or will not risk more money on his open trades and orders them closed at a loss. If customers do not respond to margin calls the house with the open lines on its book, may close the same for account of those whose margins are about exhausted.

These are extreme cases. The ten per cent. margin call is unusual. In the ordinary condition of trade from 2 cents to 5 cents a bushel protection is considered sufficient by the commission merchant. Naturally there are times when the customer can not be reached quickly or for some reason can not respond quickly enough and the commission house is caught in the gap between the wicked market and the tardy principal.

Many students of business methods are apt to conclude that all transactions on an exchange are surrounded by some unexplainable mystery. They readily understand that conditions such as drought, frost, excessive rain, etc., affect the year's output of produce, and the whole problem of grain speculation is made up of factors as plain and simple. The speculator watches the crops of the world the year through. If the winter crops go into the ground in good shape it is the first promise of abundance for the coming year. If spring crops are seeded favorably and a large corn acreage is planted the probability of abundance increases. Everything else left out of the question, this farm prosperity starts the speculator selling months ahead. If the opposite is true—adverse seeding seasons, winter killing of wheat and wet weather delay in corn planting—the speculator begins buying on the theory of short supplies and naturally higher prices. Extend this system of observation so that it covers the importing countries of Europe—chiefly England, France and Germany—and the competitors of America in exporting supplies to Europe—chiefly Russia, Danubian countries, India, Australia and Argentina—and you will find the commercial reason for ninety per cent. of the trading done on future con-

Prices based on
Trade News

tracts. If importing and exporting lands are promised short crops then very high prices for twelve months ahead are almost certain. If both importing and exporting countries have an over abundance promised, prices are likely to be depressed. The speculator also takes into account the reserves on hand from the previous year. This is important whether these reserve stocks are at home or abroad. Weather conditions are watched every day of the year. Great crop promise may be changed in a night by a hard untimely frost, by hot winds, by excessive rains at harvest or by a widespread drought during the growing period. The perfection of the signal service and the weekly and monthly weather and crop reports furnished all exchanges by the agricultural department at Washington have become more and more an aid to the trade in shaping prices according to natural conditions.

In a general way the Produce Exchange is a benefit to both producer and consumer. The first great benefit is in the accuracy with which the organized trade gathers and makes public valuable information about production the world over. Both producer and consumer can more intelligently prepare for the future—the one by selling quickly or holding on to his year's production as the conditions suggest, the other by making his contracts early for supplies or by holding off for lower prices as his judgment might direct. In the event of poor production at home the speculator is the best friend of the farmer. Long before the grain approaches harvest and perhaps months before the great American corn yield is to be gathered, the traders who watch every feature of crop development have advanced prices to a high level and the man who owns the acres is the first to feel the benefits. He may have less bushels to market but his crop loss is to a large extent made good by the markets made possible only by the Produce Exchange as here outlined.

**Benefits of the
Exchanges**

CHAPTER XLV.

THE PRODUCE EXCHANGE—Continued.

CASH GRAIN; FUTURES; INSPECTION; BUCKET SHOPS.

Although about ninety per cent. of the contracts made on any exchange are in "futures" there must always be the very important basis of cash business. Without the actual property the contracts for future delivery would mean nothing and would have no standing in law. The main features of cash trading will therefore be considered first. A good portion of the trading hall is generally given to what are termed cash grain sample tables. The grain house with a certain number of cars of wheat, corn, oats, rye, barley or flax seed on the railroad tracks for its disposal hastens to have samples of the same displayed on these tables. The samples are in small paper sacks, the contents of which have been taken from the cars when they were inspected on arrival. Each sack contains the name of the railroad line over which it was received, number of the car, the grade affixed by the official inspector, etc. When the samples are placed on the tables the grain is on the market. Around these sample tables gather the receivers who have grain to sell and buyers of all classes who wish to secure a share of the current receipts from the country. As suggested before, these buyers may include: First, elevator owners who want the grain to fill their houses for the profits in the storage; second, the millers or their agents buying wheat to grind; third, brewers and distillers who wish corn or barley for manufacturing purposes; fourth, the agent of the cereal company who wants oats for his plant; fifth, the shippers who have need of grain of all kinds to fill contracts made with eastern distributors, with actual con-

Cash Grain
Trading

sumers or with export interests contracting for supplies needed abroad.

When the seller and buyer agree on a price for a single car of grain or for fifty cars, as the case may be, the sample bag passes to the buyer. He can then direct the railroad having the cars on its tracks how to dispose of them. They may be ordered to a certain warehouse or mill or other plant to be unloaded or they may be ordered switched to the tracks of some other road to be forwarded to the point for which the grain was purchased. These transactions repeated on each trading day of the year constitute the chief feature of the cash grain trade.

**Property Passes
to Buyer**

Another important feature in the cash grain business is the delivery of grain in either private or public warehouses. Sales may be effected from private houses by samples or from public warehouses by the tender of the official receipt or certificate representing the grain when it went into storage. Usually sales made from storage houses are for larger amounts—possibly only 25,000 bu., if some special lot of grain is desired—but more frequently 50,000, 100,000 or 250,000 bushels where the grain is to be moved out by rail or water in large quantities. In all these transactions the bill of lading, the certificate of the public weighmaster, and the official inspection certificate pass with the grain to the buyer who gives in exchange his check in full payment. This closes the cash grain transaction.

That part of the business of the Produce Exchange which receives most notice by the press and the public is known as “trading in futures” or speculation. Unreasonable critics of the system go so far as to call this feature of the business gambling. This phase of criticism was discussed in a previous chapter on the Stock Exchange, which furnishes a parallel case.

Each member of a Produce Exchange can do business on his own account or he may execute orders for others inside or outside the association. If he operates for others he does so on a

commission prescribed by the rules. He must in making a report of his trades to his principal state in certain written form

Trading in
Futures

with whom he made the trade in the open market, the time at which it was made and the price.

If a member acting as a broker for a fellow member or as a commission merchant for an outsider makes ten or twenty or two hundred trades in a day the same exacting conditions attach to each separate transaction. It is the growth of such business that builds up, first the small commission firm and possibly, later, the great grain and banking house with private wires stretching out to other exchange points and penetrating into the states tributary to the home exchange.

The trader who sees in existing conditions on a certain day reasons for higher prices and operates with a view of advancing the market is called "a bull." The trader who does the opposite is called a "bear." The entire trading body as well as the public, so far as it takes any part in the making of the market,

is thus divided into bulls and bears as on a stock or cotton exchange. If a man with money to invest or risk in a business transaction buys a vacant lot in a suburb and sells it a month or a year later at a certain advance or a certain loss he has engaged in what the trade and the public call speculation.

It is a simple matter to apply the same attempt at profit making to the products of the soil. The grain trader goes into the open market where he meets hundreds of others and makes trades—makes contracts for future delivery—under the fixed rules of the exchange—in grain. He buys in midwinter or early spring on May contracts or in the summer or fall on September or December contracts. While he is

Speculation in
its Details

doing this another member has made a sale of a certain quantity of a specified kind of grain to be delivered in May, July, September or any other month. Long before the month named arrives, the man who had the grain

bought—finding himself with a profit of several cents, goes into the same open market and sells out a like amount. The member who sold originally finds the market several cents against him. He goes into the market and buys a like amount. The one draws down profits from the clearing house. The other puts his check into the clearing house to make good his losses. Both are even on the market. Both have engaged in speculation in its simplest form.

Assume that the original trades stood on the books without any offsetting transactions until “delivery day,” the last day of the month named in the contracts. Then at that date, under the rules, the buyer must be in a position to take the 5,000, 10,000 or 50,000 bushels named in the contract and pay for them.

He then has to deal with cash property and he
Delivery Day has turned over to him warehouse certificates calling for the actual property for which he must draw his check in settlement. The original seller, on the other hand, may tender the amount of grain named on “delivery day” or he can deliver the same at fixed hours on any trading day of the month named in the contract.

The member or house which for his own account or on orders from a principal continues to buy certain cereal for some future month on a large scale for weeks or months in advance becomes a factor in the market to the extent perhaps of causing a marked upturn in the price. Those who have thus bought are termed in the principal “longs” or holders in that particular cereal on that exchange. Those who have sold to this large buyer or to others, day after day are termed “shorts.”

These latter may find the market going too much
Longs and against them and through fear of heavy losses
Shorts may switch suddenly to the buying side for protection. This is called “covering,” a performance which often adds great force to the buying side and results in a sharp advance in the price for the time being. On such a swell in the

price the large holders may reduce their lines at good profits or may continue to buy up to delivery day when they can demand the actual property. This condition may be reversed. The holder may find the market each day going against him. The sellers may grow bold, pressing the market lower until the longs are forced to abandon their position. If they sell out to prevent further losses it is called forced liquidation—just the opposite of covering by shorts. The short sellers, with a decided advantage in the market because of the decline, may buy back to offset previous sales or may continue short until delivery day when they are obliged under the rules to produce the property sold—having the entire month to make the delivery. This kind of trading gives rise to all the turns in prices in a speculative market. When carried to extremes it gives rise to violent fluctuations in prices by which smaller or more conservative traders are greatly inconvenienced and often financially injured.

Following up the foregoing methods of trading a “corner” develops under certain conditions. A strong house or a group of leaders in the trade may decide that the wheat, corn or oats market is in a condition to be easily controlled and the price manipulated. The shipping demand for a certain cereal has reduced stocks. The country roads are bad or farmers too busy to market grain freely. Perhaps some injury threatens the growing crop and makes the country unwilling to part with reserves. If the warehouses contain but 2,000,000 bushels of the grade required to fill contracts and the man who contemplates running a corner sees that another 2,000,000 bushels is all the country tributary to the market is likely to furnish, even with the inducement of high prices, then his plan is to keep on buying until he has accumulated a line of about 10,000,000 bushels. Of this amount the sellers of 4,000,000 bushels will have the actual grain from the country and from the elevators to deliver when

Corner

the month for which it is sold arrives. The sellers of the other 6,000,000 bushels are caught "short." They have sold what they can by no means deliver. If these shorts take alarm and rush into the open market to buy or "cover" for protection then the excitement begins. Prices may be advanced several cents in a single day. After prices are thus carried far above a natural level others of the short sellers may seek to make private settlements on large lines outside of the regular trading channels. There is a third and last resort for those who sell and can not deliver. They can default on their contracts and ask an arbitration committee to fix a fair settlement price. It should be stated here that the laws of many states make the running of such a corner illegal. On nearly all exchanges, also, there is legislation against such operations. As a rule the man conducting a deal of this kind is fortunate to escape losses in the end as he has delivered to him such a volume of high priced grain that he may not be able to distribute and market it until the expense of storing, insuring and carrying the grain will offset the profits he may have secured in his settlement with the short sellers.

One of the most important features of the exchange, underlying both the cash grain trade and the transactions in futures is the matter of grain inspection. After the grain leaves the farm and is thrown upon the open market at an exchange point it becomes an element in the commerce of the world.

Grain Inspection Banks make loans on grain in transit and in store. It must carry insurance in most of its travels from producer to consumer. Somebody must vouch for it. The man who goes around the world needs personal words of introduction and letters of credit. Grain—the chief product of American farms—must start on its way in the world of trade with a certificate to show its quality. Grain inspection is conducted not by the exchange but by the state in which the exchange is located. Thus, Missouri regulates inspection for St. Louis, Minnesota for Minneapolis and Illinois

for Chicago. The governor of the state appoints a Chief Grain Inspector. This same official aided by a board of Railroad and Warehouse Commissioners appoints a Supervising Inspector and as many assistants as the size of the railroad center and the volume of grain handled suggest. These assistants visit the railroad yards daily and by extracting samples from the interior of the cars of grain fix upon its proper grade. These grades usually range from No. 1 to No. 4 and below this it is classed as no grade or rejected. It is with the higher grade the greatest care is needed. Most exchanges specify that contracts may be filled with No. 1 or No. 2 grain. If the state does its work well other exchanges and grain merchants the world over learn to accept its certificate of inspection without question. The state not only inspects grain as it is received, and before the samples are offered on the exchange, but it places inspectors at warehouses to certify to quality of cargoes withdrawn from store for shipment by boat or rail to their destination. Millions of bushels of grain are sold every month in the year to European buyers who rely on the grade given the grain at the American exchange point by the state inspectors.

At times when sellers are making heroic efforts to rush grain to market to fill large contracts it is often of the greatest importance to have the receipts grade No. 2 instead of No. 3. The

**Raising the
Grade**

one certificate will make it deliverable on a contract made on the exchange, the other will not.

Growing out of this emergency, in attempting to make grain good on contracts, there has grown up at each exchange point a system of private elevators equipped with machinery for cleaning and drying grain to raise its grade. It is then passed to a public elevator, is again inspected and may be delivered on contracts. What is known as "kiln dried" corn is very desirable in commercial circles at certain months in the year—especially the germinating season—when corn containing moisture cannot be shipped long distances without heating or sprouting.

Before concluding this discussion of the Produce Exchange it may be proper to refer to a species of gambling conducted under the semblance of grain trading, and known as the operation of "bucket shops."

The bucket shop is an imitation of the commission house. The one is an outlaw in most states in this country, the other as legitimate as filling of orders for coal, lumber or merchandise. The commission house fills orders entrusted to it in the open market, where every purchase or sale has its effect in making the prices, on which producers sell their crops and consumers both domestic and foreign base their purchases. Every sale contemplates delivery and every purchase contemplates the ability of the buyer to take the actual property on delivery

Bucket Shops day. Bucket shops generally secure their quotations, (which they mark up on a black-board,) from the exchange by trickery. They never create a quotation, except it be a false one to get the best of an innocent customer. The bucket shop system is to take the wagers of its victims on the next turn in the regular market, the money passing over the desk as if betting on a horse race. Most trades are made on 1 cent a bushel margin and the bucket shop deducts its $\frac{3}{4}$ c or $\frac{1}{4}$ c a bushel from the price when the outsider makes his bet. It is a gamble pure and simple on what the market is about to do. No bucket shop ever controls a bushel of grain, ever makes a delivery or fills an order in the open market unless for protection. Nearly all the highest state courts and the United States Supreme Court have ruled in test cases that regular exchange methods are proper commercial transactions while the bucket shop is declared an evil.

STORAGE AND WAREHOUSING.

CHAPTER XLVI.

BONDED, PRIVATE AND COLD STORAGE WAREHOUSES.

IMPORTATION OF GOODS; CLASSES OF BONDED WAREHOUSES; RESTRICTIONS; COLD STORAGE SYSTEM.

It is frequently not convenient for an importer to pay the duty upon an invoice of foreign goods immediately upon their arrival. He may have imported the goods to meet a demand several months later. He imports the goods when he can get them or when he can buy them to advantage, and holds them until the demand for them arises. Many foreign articles, such as the laces of Switzerland or the rugs of Persia are made in the cottages or homes of the people. These are bought up by middlemen who go about collecting them, brought down to the seaport and there disposed of to American buyers who purchase for our market. Such purchases must be shipped to America at once. Even in countries where the factory system prevails it is often necessary for our merchants to place their orders far in advance of the demand. This of necessity requires large capital, and as the duty is a considerable item, it is a great convenience to merchants to be able to leave the goods in the hands of the Government without payment of the duty until they are needed for sale.

A bonded warehouse is one designed especially for the storage of imported goods awaiting payment of the duty by the importer. Such warehouses are frequently owned by private individuals, but are constructed under the supervision of the Gov-

ernment and are fire-proof. They are under the absolute control of the Government and are isolated from other buildings. A Government officer known as storekeeper is in charge of each warehouse. He is held responsible for the records and safe-keeping of the contents. No goods can be delivered from the warehouse without a written permit from the Collector of the port, which must be presented to the store-keeper. He checks all goods into the warehouse, and when a permit for delivery is presented, he checks out the goods needed by the importer. Goods may be left in a bonded warehouse three years without payment of duty.

Bonded warehouses are, for convenience, divided into several classes. Class 1 consists of warehouses owned or leased by the Government and are known as General Order Stores. This class is the receptacle for all unclaimed, abandoned or seized merchandise, the owners of which have not complied with the law. Class 2 is for the special and exclusive use of the firm or corporation owning it. It is usually located near the business house of the firm, and contains no goods except theirs. It is in charge of a government store-keeper and subject to the same restrictions as other warehouses. Its entrances and exits are separated and its keys are held by the store-keeper who checks the receipt and delivery of goods. Class 3 is for the general storage of goods in bond. Any importer can store his goods in Class 3 warehouse.

When the goods are landed at a port of entry the merchant to whom they are consigned gets notice of their arrival, and if he does not desire them for immediate consumption he enters the goods for the bonded warehouse, or if they are in a warehouse at some port, he enters them for re-warehousing, gets a permit to transport them to the warehouse near to his business home, and without paying duty transports them to his home port and places them in a bonded warehouse, almost as convenient to him as his own store, and

Storekeeper

Classes

**Receipt of
Goods**

there he may allow them to remain until his customers call for them. When the goods are received at the bonded warehouse the storekeeper inspects the condition of the packages, opens an account with that merchant and enters the number of the bond on his book with the number of cases and marks on the same, to await the pleasure or wants of the owner.

A merchant may withdraw a portion of an importation by paying the duties upon the goods covered by that consular invoice. Usually merchants have their foreign orders made up into convenient consular invoice quantities, so that in case it is desired to withdraw a special class of goods, it is not necessary to pay the duties on a large quantity of other goods. All goods not withdrawn from the bonded warehouse in the three years, are considered abandoned, and are sold at public sale.

An American manufacturer may bond his factory to the Government* so that it will be possible for him to import raw materials, manufacture them into a finished product, and ship this to a foreign country without the payment of any duty upon the raw material. His factory would then be called a manufacturing bonded warehouse, and would be subject to the same regulations as other bonded warehouses.†

**Withdrawal of
a Portion**

**Manufacturing
Bonded
Warehouses**

PRIVATE WAREHOUSES.

Ordinary warehouses are denominated free, or private, to distinguish them from bonded warehouses. The Government has no control over them. They are for general storage purposes, or for that of imported goods on which the duties have been paid. Manufacturers frequently have occasion to store up

*He may furnish the Government with a bond as security, and submit to the regulations.

†A manufacturer may pay the duty on raw material imported, manufacture it into a finished product, ship this to a foreign market and receive a refund of the duty paid on the raw material, under certain restrictions. This refund is called a "draw back."

their products to meet the demands of the season when such goods are salable. Wholesale houses frequently carry in addition to their regular stock, large quantities of merchandise in store, especially when confident of a rise in price. Goods seized under writs of replevin or attachment are stored awaiting judicial sale. Furniture and valuables are stored awaiting shipment or use, etc. Free or private warehouses are owned and conducted by private individuals as a business. The rates are less than in bonded warehouses, as the business is free from Government restrictions, and are based generally upon the space occupied in cubic feet. The warehouse receipt given by a private warehouseman is an assignable instrument and may be used at the bank as collateral security for money borrowed, or in many instances warehousemen make advances to the extent of one-half or three-fourths of the value of the property stored, charging interest at ruling rates. Perishable goods, of course, do not find their way into bonded or private warehouses. They are placed in cold storage.

**Private or Free
Warehouses**

COLD STORAGE WAREHOUSES.

Out of the development of our modern domestic and foreign commerce and transportation systems has come the cold storage warehouse. By means of cold storage the preservation throughout the entire year, of meats, fruits, poultry, dairy products, fish and vegetables has been accomplished to such an extent that the seasons have become practically eliminated, and the prices of these necessities of life have been made uniform. In the season of abundance, instead of becoming a glut on the market, these products are placed in cold storage and preserved until trade conditions will warrant placing them on the market. Cold storage warehouses are constructed with specially built walls of great thickness, containing insulating material such as asbestos, cork, charcoal, shavings, etc., and every precaution is taken against the admission of out-

Cold Storage

side heat. Formerly cold storage products brought a lower price in the market than those that were fresh, but under improved cold storage methods they now bring as high a price in the market and in some instances even higher. Eggs stored in March and taken out in November, sell as high as the fresh commodity. Eggs have been kept two years and found perfectly sweet when used. Five or six months is the usual period of storage with most products.

It is estimated by a reliable authority that products worth over \$500,000,000 are placed in cold storage annually, in the United States. Thousands of tons of meat are stored for pres-

Extent in the United States	ervation awaiting distribution; between three and five million cases of eggs find their way into the cold stores each season; between one and one-half and two million 60-lb. tubs of butter, besides large amounts of oleomargarine, are stored; some two to three million barrels of apples are put in the cold rooms each fall, as well as great quantities of other produce, including vegetables of all kinds, molasses, tobacco, silks, furs, upholstered furniture, etc.*
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The greatest center of the cold storage industry up to 1902 was Chicago, it having long been the greatest railroad center and center of supplies, and, being the first to engage extensively in the cold storage of eggs, became the egg center of the country,

Cold Storage Center	more than 600,000 cases of 30 dozens each finding their way into the Chicago coolers each spring.
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The greatest center, if Jersey City and Newark, N. J., are included, is New York, partly because of the vast local market and also because of her great export and import trade in perishable goods.

Fish freezing and storing warehouses are now found in all parts of the United States, including Alaska, as well as Canada

*These latter articles are placed in cold storage to protect them from insects. The leading retail dry goods houses in our large cities provide cold storage rooms for such articles, for their own as well as their customers' accommodation.

and foreign countries. The great fish freezing and storing houses in Washington, Oregon and Alaska, handle many millions of dollars worth of fish annually. The fish are mostly halibut, salmon and herring, and are frozen alive as caught, by placing them in cold storage warehouses, from whence they are shipped

Fish in refrigerator cars to the Atlantic cities and to
Meat Europe. Cold storage of meat has reached its greatest development in Great Britain, as that

country imports 60 per cent. of its meat supply. Vast quantities are shipped from the United States, and besides a fleet of nearly two hundred vessels is constantly engaged in carrying meat from Australia, New Zealand and Argentina to England, the meat being first frozen, and then kept frozen throughout the long voyage across the tropics, in the cold storage holds of the ships.

By experiment it has been ascertained that certain temperatures are best suited to the preservation of certain products and in a well regulated warehouse it is comparatively easy to maintain at all times the temperature best suited to the purpose.

Thus a temperature near the zero of Fahrenheit best preserves fish, butter, ice cream, etc.; 20° to 28° furs and
Temperatures fabrics; 30° to 32° eggs; 31° to 33° apples, fresh meat or cheese; 34° to 36°, pears, peaches and other delicate fruits, vegetables and the retarding of plant growth in flowers out of season. All these varied temperatures are maintained in different rooms of the same warehouse at the same time.

The introduction of the refrigerating machine in 1890 gave the first great impulse to the establishment of commercial cold storage warehouses. Prior to that time ice and salt were the

Refrigerator only means of securing the desired temperature,
Machine and this method is still in use to a small extent, but it is accompanied with serious objections, such as the carrying away of the moisture from the melting of the ice, the difficulty of obtaining sufficiently low temperatures

or of keeping them under absolute control at all times, and, especially in the south, the excessive cost of the ice required. All these objections were overcome by the introduction of the ammonia or carbonic acid refrigerating machine. Liquid anhydrous ammonia, which can only be kept so under pressure, when allowed to expand into a gas, absorbs heat. The refrigerating machine simply reconverts the gas into a liquid to be again expanded, absorbing more heat, again liquefied and again expanded the process being continuous so long as the machine continues in operation.

The charges for cold storing vary greatly, and only on the most staple goods are charges anything like fixed. Apples usually pay 15c. per barrel for the first month and 10c. per month thereafter. Butter for long storage in zero rooms at about 1/8c. per lb. per month, at 5° below zero at 1/6c. per lb. per month. For eggs the charge is about 10c. per case per month or 40c. for the season, May to January. The ordinary charge for storage of furs is: for muffs 75c. to \$1.00 and for fur capes or garments \$1.00 to \$2.50 for the season of eight or nine months.

The cold storage warehouseman, in addition to receiving goods from others for storage, is often a purchaser and owner of a considerable portion of the goods he stores. In Europe generally, and in this country to a small extent, negotiable warehouse receipts are issued for these goods and used as collateral for loans. The lesser use of these instruments of credit in this country is due, partly at least, to the absence of any definite system of inspection and of licensing and hence the lender depends largely upon his faith in the integrity of the individual warehouseman. The very fact that the goods are termed "perishable" casts suspicion upon them as security for loans even though they may be of the most staple character and as safe as any personal property.

Insurance is a serious problem for the cold storage ware-

Charges

**Warehouse
Receipts as
Security**

houseman, as a slight damage by fire to the refrigerating machinery might cause enormous damage to the goods stored; hence insurance companies have compelled the warehouseman to become a co-insurer or pay additional premium on a "consequential damage" clause in the policy.

TRANSPORTATION BY RAIL.

CHAPTER XLVII

RAILROADING.

RAILROAD OWNERSHIP; CAPITALIZATION; TRAFFIC ASSOCIATIONS; POOLING; DIFFERENTIAL RATES; ETC.

In 1830 there were thirty miles of railroad in the United States. This had increased to 9,000 miles in 1850, to 53,000 in 1870 and to 192,162 in 1900. The total railroad mileage of the world in 1900 was, approximately 445,000 miles, with a capitalized value of \$35,000,000,000, and of this the United States possessed 42 per cent.—nearly half. The railroad property in the United States in 1900, consisting of track, rolling stock, depots, shops and other buildings aggregated nearly \$12,000,000,000. This enormous creation of property and development of transportation facilities has been the product of seventy years' effort and progress, all growing out of the application of steam power. The wide area of the United States will explain in a measure the enormous mileage of our railroad systems. The European countries being of smaller area have shorter railway lines, and yet it should be remembered that the United States has the largest mileage in proportion to population of any nation. For every 10,000 inhabitants in the United States we have 26.1 miles of railway; England, Scotland and Ireland, 5.2; Germany, 5.6; France, 6.6; Russia, 2.2; Spain, 4.2; Brazil, 4.7; and Argentina, 19.6.

The enormous development of our railway interests has been the means of accelerating the commercial progress of the

United States to a wonderful degree. This development has not only been typical of the evolution of industrial organizations in this country, but in a large degree has assisted in bringing about the wonderful industrial advancement which has been made in the past fifty years. By means of the improvement in transportation facilities our industrial and social life has been revolutionized. Producers have had their market widened until it is now almost a world market, whereas before, the sale of many articles was restricted to the localities in which they were produced. The consumer likewise has a world market in which to buy. He is not confined to his home production. The prices of all the utilities of life are more nearly uniform, since improved transportation has given them a better distribution. The variation in prices due to situation has been lessened. Improved transportation has also lessened the general prices of commodities, since it enables either raw or finished products to be moved cheaper, thus reducing the item of transportation which enters into the final cost of the goods. It also enables the merchant to "turn over" his stock or capital quicker and oftener and thus do business at less expense and hence at a smaller gross profit.

The development of transportation has also been the cause, in a large measure, of the growth of our cities, since it enables manufacturers to locate their plants in the great centers of population where there is an abundant supply of labor, and where shipping facilities are favorable, irrespective of the location of the raw material. The steel mills of Chicago and Milwaukee are examples of this, being situated at a considerable distance from the ore and coal, but near populous centers. The location of great industrial plants in or near towns or cities adds to their financial and commercial importance, and this in turn assists in their growth. New agricultural districts have been opened up and

Industrial
Evolution

Cities
Agriculture

profitably cultivated, through the facilities for disposing of the crops, afforded by improved transportation, while other districts have been abandoned or changed to grazing land, on account of the competition of more productive localities. Thus Massachusetts has practically ceased to produce wheat, and now receives its food products from the west in exchange for its manufactures.

The railroads of the United States are owned and conducted almost entirely by private corporations. The majority of the railroads of Germany belong to the government, and those of most other European nations, except England, are under the direction and control of the government. The advantages in favor of government control are, that the system of transportation will be operated at actual cost, thus saving to the people as a whole the profits which otherwise would go to private individuals, and that the power and control of the government will be extended and enlarged. This latter may be desirable in a monarchy, where the hand of the government is constantly upon all of its subjects. The Roman Empire built extensive roads as a means of extending and solidifying its power. In a republic, however, the same reason scarcely exists. The reasons against government control are that we prefer to check, rather than extend, the power and influence of our government; that private enterprise supplies every demand for transportation facilities, and builds competing lines which would not be built if our railroads were all under government control; that the tariff rates for both passenger and freight traffic are reasonable, and are made under government or state restrictions.

The average capitalization of the railroads in the United States is lower than that of any other country, being about \$60,000 per mile. This includes costly bridges, such as those which span the Mississippi river, tunnels through mountains or beneath cities, such for

**Railroad
Ownership**

Capitalization

example as those under St. Louis or Baltimore, besides numerous examples of costly expenditures in the execution of difficult feats of engineering and construction. The English railroads cost \$200,000 per mile, those of France \$128,000 per mile and of Germany \$105,000 per mile. This difference in cost between American and European railroads has been ascribed to various causes, but is no doubt due largely to the more permanent and costly character of European roads. Perhaps more water in the stock, items of general expense such as the cost of floating the bonds, interest on the capital while the roads are under construction and profits of construction companies, are included as a part of the cost of European roads.

Inventions and improvements during the past twenty-five years have steadily increased the efficiency of the railways and made the transportation of both passengers and freight not only more rapid, but safer and more economical. The substitution of steel for iron rails, made possible by improved processes of manufacturing steel, the use of heavier rails—
Efficiency more than 120 pounds to the yard in some instances—heavier cars, air brakes, automatic couplers, block signals, all have combined to improve the efficiency of our railway systems.

Another condition which has contributed powerfully towards the general efficiency of the railways of the United States during the past third of a century has been the consolidation of companies and concentration of management. The early railway companies were small, and their lines were
Consolidations short with varying regulations and tariffs. Between Buffalo and Albany in 1850 there were seven different companies operating, resulting in great inconvenience to both passengers and freight traffic. The small companies have nearly all entered into combinations, or been absorbed by large companies, until the railways lines of the country are now combined in a few great systems, with thousands

of miles of track, such as the Pennsylvania, New York Central and Santa Fe. As an example, the Pennsylvania system now comprises over ten thousand miles and is composed of nearly two hundred small railway lines. Many of these were purchased outright by the Pennsylvania Company and absorbed into the system, while others are operated as subsidiary corporations. This great system transacts one-eighth of the entire railway freight and passenger business of the United States.

Railway associations and agreements in regard to the maintenance of rates, character and conditions of service to be performed, classification of freight, interchange of cars whereby shipments between roads can be made without transfers from car to car, establishment of rates, etc., have tended to further develop the efficiency as well as economy of our railways. The

Traffic Associations causes which brought about the organization of railway traffic associations were the necessity for co-operation, through tickets and through bills of lading, the interchange of cars with connecting lines, so that, for example, a car load of grain could be shipped from Minneapolis to the seaboard without change, and the necessity for the regulation of competition. As a result we have claim associations, car-service associations, passenger associations and other organizations for the adjustment of all questions arising in each department of railway service. The organization of small companies into large ones and the consolidation of lines led to violent competition and rate-cutting during the '70's, and was finally overcome by the associations referred to.

From the organization of railroad associations it was an easy step to "pooling," which consisted in dividing the total earnings of several competing lines according to an agreed basis irrespective of the amount of business actually done by the different roads in the pool.* The organizing genius of Mr.

*The dangers of a pool lie in the arbitrary power which it places in the hands of a few men, to fix rates, control traffic and exercise a monopoly which affects business interests extensively, but in this there is a relief from

Albert Fink first developed the railroad pool. He organized the Southern Railway and Steamship Association (1875) in which were included nearly all of the railroad systems of the south besides several connecting steamship lines. The **Pooling** object of this pool was to settle what portion of competitive traffic each line should carry, and those which carried more than their share were required to pay their rivals the excess receipts less the bare cost of carrying. The "pooling" feature was more or less a prominent one in nearly all railroad association agreements until prohibited by the Interstate Commerce Act.†

The earnings of the railroads of the United States for freight traffic are much more important than those for the passenger service, being about three times the amount received for passenger business. In some parts of New England where the population is dense, the passenger receipts may equal the freight, but a large portion of the freight of the country is hauled considerable distances, and the earnings are correspondingly great. Our principal grain fields are 1,000 to 1,500 miles from the seaboard, and hundreds of miles from the great commercial centers; our mines and forests are situated long distances from the coal beds or the factories. The fruit from California and live stock from the great plains of the west are carried to the Eastern market. This movement of great quantities of bulky freight long distances results in large revenues for freight traffic while the distance discourages passenger travel.

Railway freight rates in the United States average but a cent

the evils of the competitive system with its rate wars and destruction of profits which should accrue to stockholders or be used for the betterment of the road.

†The Interstate Commerce Law was passed by Congress in 1887, after fifteen years of agitation and investigation. It prohibited unreasonable rates and unjust discriminations, between persons, places and classes of traffic, prohibited pooling agreements, provided penalties for violations of its provisions and established a commission of five men to enforce its requirements.

and a quarter per ton per mile.*. This is lower than any other nation and probably not more than half what it was thirty or forty years ago. Improved machinery, Bessemer steel† and competition have caused a steady decline in the rates. This decline has been accompanied by a general lowering of the prices of the most important articles of traffic, and would have been even greater but for the fact that it was made in the face of steadily advancing wages for labor.

In the case of most commodities the public will buy and use a given quantity at a fair price. If then the price is lowered, the quantity consumed will be increased, or if the price is raised, the quantity will be diminished. Transportation charges are properly regarded as a part of the first cost of all those commodities which must be transported from the producer to the consumer. The consumer always "pays the freight" as well as the profits of the middlemen, in addition to the original cost. Each producer, then, who desires to extend his business or increase his sales, perceives at once that it is only necessary for him to secure lower rates on his shipments. Any concession in rates cheapens the cost to the consumer and increases the volume of sales. Whether certain articles shall be sold in a given locality often depends upon freight rates from two competing points. Whether salt from Michigan or from Kansas will be marketed in St. Louis depends upon the freight rates between these two localities and St. Louis. Whether shoes made in Chicago can be sold in Pennsylvania in competition with eastern shoes, depends upon the freight rates. A persistent pressure is being constantly brought to bear upon the railroads by both shippers and consumers to secure a reduction of the transportation charges in order to extend sales or reduce the cost of pur-

*Our average passenger charge is 2.35 cents per mile, while that of most European countries varies from 1.3 to 2 cents.

†Price of Rails Per Ton—	1868	1872	1876	1880	1884
Bessemer steel	158	112	59	67	81
Iron	79	85	41	49	..

chases. This was strikingly illustrated by the rivalry which existed at one time between our principal seaboard cities, New York, Boston, Philadelphia and Baltimore, in their efforts to secure export business. So great was the pressure brought to bear on the railroads by the commercial organizations of these cities in their competition for export shipments that rates were utterly demoralized. This was through the competition of the cities, as well as the railroads, and to such an extent was the contest carried that in 1882 it culminated in arbitration proceedings in which the questions involved were submitted to a committee consisting of Messrs. Allen G. Thurman, Elihu B. Washburne and Thomas M. Cooley, for adjustment. The findings of the committee resulted in fixing the relative freight charges to these ports, called "differential rates," upon such a basis that they have remained practically unchanged since. By this adjustment Philadelphia was given a small advantage over New York, in the matter of rates from the West, and Baltimore, a still smaller advantage over Philadelphia. Owing to a threatened diversion of the grain trade of the Northwest to Gulf ports, the rates on grain to all eastern ports have since been materially reduced to meet this competition. A "differential" rate then may be defined as one which is made between two points, not with respect to the distance as traversed by the different transportation lines, but with regard to competitive traffic. Thus between Chicago and New York the passenger fare is the same on several lines of railroad, and yet the distance traversed varies more than four hundred miles.*

While it is strictly true that a decrease in transportation charges causes, as a rule, an increased demand for the products

*Between Chicago and New York there are over twenty routes varying in length from 912 to 1,376 miles, which compete for traffic. Between St. Paul and Chicago the short line distance is 373 miles and traffic is carried by a line 734 miles in length. Between Omaha and San Francisco five roads compete, varying in length from 1,865 to 2,765 miles.

shipped, nevertheless this rule is not an invariable one. There are commodities which form a partial exception, and if considerable reductions in cost were made, the volume of business would be but slightly augmented. For example, rates on boots,

**Exceptions to a
General Rule**

shoes, clothing and household utensils, if reduced would not materially increase consumption, since people are inclined to purchase such articles as they are needed. The same could be said of coffee, tea, salt and those articles which are consumed in small proportion to the total value of the requirements of consumers. In making rates then for freight traffic, it would be useless for an association to reduce the tariff on those articles which have a fixed and uniform demand, and would not be influenced by a reduction.

CHAPTER XLVIII.

TRANSPORTATION BY RAIL—Continued.

CLASSIFICATION OF FREIGHT; FREIGHT RATES; COST OF SERVICE; ETC.

Almost an infinite variety of commodities is offered to the railroad companies for transportation. If all articles were embraced under a single schedule and charged according to bulk or weight, irrespective of value, those articles having large bulk with small value would be charged exorbitantly, while articles having small bulk would escape their just portion of transportation charges. Thus coal, grain and lumber would be subjected to a charge which would be prohibitive, and would place them beyond the ordinary uses for which they are now produced. The problem in the classification of freight is to so fix the tariff as to produce the greatest amount of revenue for the railroad and at the same time not fetter or hinder the transportation of products by excessive charges. The tariff rates upon transportation lines have an important bearing upon the prosperity of the communities through which they run, by stimulating or retarding production of commodities. The earliest freight tariffs involved a very imperfect classification, and each railroad had its own system, but as the through business developed, this multiplicity of freight rates was found inconvenient and cumbersome, making it difficult for shippers or buyers to ascertain in advance what the freight charges upon a long-distance shipment would be.

Railroads divide their freight into four or more general classes, according to bulk and value. Goods having great value and small bulk, such as dry goods and groceries, are placed in

the first class. Lumber, fuel, grain, ore and other bulky but low priced commodities are placed in the fourth or a lower class. Goods of the first class are charged two or three times as much for transportation as those embraced in the fourth class. It is true that the greater risk assumed in carrying goods of high value, together with the extra care and labor in handling or storing them, will in a measure justify a higher freight charge, but this is very slight in comparison with the difference between the rates upon the two classes. The carrying charges upon different classes of freight are not based upon the cost of the service, but upon what traffic will bear. If a ton of lumber were subjected to the same freight charge as a ton of dry goods, no lumber would be shipped. The freight rate would be practically prohibitive. Thus by means of a wise classification of freight the cheap traffic is made possible, and the high-class traffic is not seriously hampered, the railroad revenues are increased by a large volume of business and the public wants are satisfied. Sometimes a commodity is placed in two or more classes depending upon the quantity shipped. Thus car load lots receive a lower rate than is allowed to the same commodities in less quantities.

In former years railroad companies sometimes placed certain commodities in a lower class temporarily in order to stimulate new industries or develop traffic in certain directions. Large shippers were given special advantages over small ones in the form of rebates against their freight bills, and competing points were accorded lower rates than non-competing points. An extensive system of favoritism and discrimination thus grew up which abounded in injustice to the public, and interfered with the natural operations of trade. To remedy the evil, Congress, in 1887, enacted the Interstate Commerce Law, designed to prevent unreasonable rates and unjust discrimination between persons, places and classes of traffic.

Object in
Classification
of Freight

Unjust Dis-
criminations

At first impression it would seem that the charge for carrying freight should depend wholly upon what it costs the company to perform the service, and include a fair profit for the capital employed in the business. But freight rates are not usually fixed in this way. Three factors must be taken into account in determining rates. The first is, what will it cost the company to furnish such service? Second, what will the shipper be willing to pay, or what can he afford to pay? Third, what competition among other transportation lines, by either land or water, must be met or overcome in order to secure the business. These three factors in the problem must be considered in arriving at the freight rate.

It is not practicable to fix rates on a basis of cost of service, because it is not possible to determine in any particular case what the actual cost of the service has been. Thousands of items must be taken into consideration in arriving at the total expenses of running the road, and no official can say just what proportion of these expenses should be chargeable against any particular shipment. Again, as previously stated, it is only by charging certain commodities of high value a large profit over the cost of service, that commodities of low value can be carried at a very low rate.*

Fixing rates according to the value of the service to the shipper, or what he can afford to pay, is called "charging what the traffic will bear." This method aims to make the charges such as to produce the most revenue to the railroads without at the same time reducing the volume of traffic. If the service is of great value to the shipper, and enables him to reap a large profit on the goods shipped, he can well afford to pay a liberal freight charge, and this will enable the railroad company to carry other and less

*Commodities of low value are carried at low rates also on account of the large volume of that traffic and the slow speed of the trains. Thus coal trains run at low speed, while trains loaded with perishable goods must be run at a much higher speed, and at an increased cost.

profitable merchandise at a low rate. Expensive articles of small bulk will bear a high charge without adding much to the percentage of increase in cost caused by the carrying charges, while farm products and other bulky freight must have a low rate, or they will not be produced and shipped.

Competition must always be taken into account in fixing rates. Charges must be fixed and modified according to the varying conditions under which railway traffic is conducted. There is not only the competition of rival lines of railways, but also that of waterways. In a very large portion of the United States shippers have a choice of transportation by rail or by water upon the great lakes, rivers and canals. There is also the competition of cities and markets to be taken into account. Thus the Atlantic cities are in sharp competition with gulf ports or outlets for the products of the Northwest. A more favorable market in one city than another will influence the stream of traffic in a corresponding direction. Competition then is an important factor in determining freight rates.

Attempts have been made in various states to prescribe that freight charges shall be in proportion to distance. Such rates are termed "equal mileage rates." But these are obviously unfair since it costs a railroad company more than half as much to carry a shipment fifty miles as to carry it one hundred miles. Goods must be stored, handled and billed, the same for a short distance as for a long one. Once loaded upon the cars, they require very little care until they reach their destination. An equal mileage rate therefore is an injustice to either the railroad company or to the public.

Owing to competition and other causes it was thought necessary in some cases, in order to secure business, to take freight for a through shipment at a lower rate than was charged for a local shipment—to charge less for the entire distance than for

a part. This is called the "long and short haul," and would seem to be discrimination of the most unfair and objectionable

kind. It was quite common in railroad management prior to the passage of the Interstate Commerce Act, by which it was made illegal

in all cases when both charges were made under "substantially similar circumstances and conditions." Such discriminations have now become infrequent, and yet there are instances when the long and short haul discrimination is justifiable. To illustrate, the steamship lines doing business between New York, other North Atlantic ports and New Orleans offer such competition to the railroads that they must either make a discrimination in favor of the long and short haul or fail to secure the business. Intermediate points are not affected by the water competition. The railroads can afford to take their through business at a slight advance over actual cost of service rather than not have it. They could not reduce their local rates to the same basis without destroying their profits. Again, were railroads in the United States parallel those in Canada, a discrimination is justifiable, for if our railroads were compelled to maintain their through rates on the same basis as their local traffic, it would have the effect of sending through shipments of grain via Canada where the railroads are not under such restrictions, and would merely put profits in the pockets of foreign railroad owners. The Interstate Commerce Commission has held that competition against foreign railroads is sufficient grounds for lower rates from terminal points.

For the purpose of facilitating the shipment of freight, and especially where the property is to be shipped a long distance, over several lines of railroad, fast freight lines have been formed. Nearly all of the business from the West to the Atlantic seaboard and territory east of Buffalo and Pittsburgh is handled over fast freight lines. A few of these fast freight lines own their own cars, do their own billing and conduct their business distinct from that of the railroad companies, pay-

ing the different roads a mileage for hauling their cars. Most of the fast freight lines, however, are combinations of the railroad lines merely for the purpose of facilitating the interchange of freight, and to expedite the shipment. The railroad companies do their own billing and send a tissue copy to the fast freight office.

**Fast Freight
Lines**

The cash receipts are apportioned among the different roads in proportion to the mileage of each or on other agreed bases, and in case of a claim of damages, the matter is taken up and adjusted between the roads. The fast freight line in this instance becomes a sort of clearing house for carrying out a mutual arrangement between two or more lines of railroad.

The methods of handling freight for through shipment have been so perfected that the railroads now receive goods consigned to all stations on any road, and even to many foreign cities. Upon delivery of the goods to the railroad agent the shipper or "consignor" is furnished with a receipt in the form of "Bill of Lading." Freight is shipped in two ways, "straight consignment" or "order." When a straight consignment bill is issued, the goods must be delivered to the consignee or to the person to whom he may order them delivered as his agent. Most shipments are of this class. An order bill is one that may be transferred by endorsement. Such bills are usually for the purpose of securing the payment at destination of a draft drawn for the value of the property. The draft is usually pinned to the bill of lading, and both are sent through a bank for collection. When the draft is paid the bill of lading passes to the payer. The bill of lading is also endorsed to him and he may then claim the property. A way-bill containing the number and initials of the car, names of consignor, name and address of consignee, place of shipment, place of destination, description, weight or number of articles, class and rate of freight, and total freight, is made out for each shipment, and accompanies the goods through to destination.

**Freight
Shipment**

FOREIGN COMMERCE.

CHAPTER XLIX.

TRADE RELATIONS WITH FOREIGN COUNTRIES.

DUTIES; RECIPROCITY; BOUNTIES; SUBSIDIES; NAVAL PROTECTION.

We scarcely realize to what extent we are dependent upon the products of distant countries and climes for the comforts which we are constantly enjoying. The clothing which we wear may be from wool grown in Australia or from silk grown in France or Italy; the leather in our shoes may have come from the plains of Uruguay or Argentina; the furs that keep us warm are from the far north; the rubber that protects us from rain was the sap of a tree in Brazil; the coffee we drink was grown in Mexico or South America and the sugar and spices which we consume were grown under a tropical sun. Not only are we dependent upon the world, but in turn we contribute to the world's demand. A large portion of the beef supply of England is grown upon our great western prairies; the wheat from Dakota becomes bread in Europe; the cotton from the south clothes the peasantry of the Old World; the oil from the wells of Pennsylvania is transported to distant lands and affords cheap and safe light to those who have lived heretofore in semi-darkness, while American agricultural implements, sewing machines, tram cars, clocks, watches, typewriters, electrical apparatus and rubber goods are furnished for world-wide consumption. Merchant ships carrying the products of all nations are upon every sea. They cross and re-cross, braving every danger in order that they may distribute the products of factory, field, mine and forest.

The growth of business relations between the United States and foreign countries has not been uniform during our history, nor has it kept pace with our progress in domestic affairs. We have been chiefly absorbed in the development of home industries. Now and then, under favorable conditions, such as navigation or tonnage laws our foreign trade has advanced. The past thirty years has witnessed a wonderful development in foreign commerce, and our exports during this period have almost uniformly exceeded the imports. This development has been owing to the increase in the surplus of our food products, especially breadstuffs; to the development of inventions and methods of transportation; to the increase in the volume of our manufactures; and to the policy of reciprocity which has been in force during a portion of this time. Improved methods of transportation have enabled the products of the west to reach the seaboard cities and from thence European markets at such rates as to enter into competition with similar products of other countries. Without modern appliances the large export trade in fresh meats, butter and fruits could not exist.

The foreign commerce of a nation is vitally affected by its tariff policy. If it imposes duties upon imports it thus in a measure discourages the importation of foreign merchandise in order to stimulate home production. Or it may impose duties upon exports in order to encourage their home consumption.* Both import and export duties tend to diminish the volume of foreign commerce. On the contrary, the policy of free trade tends to encourage and increase foreign commerce. England has been practically a free trade country since 1850† and her foreign commerce far sur-

**History of
American
Commerce**

**Import and
Export Duties**

*Our constitution expressly prohibits the laying of duties upon exports.

†The only duties now under English law are a small export duty on coal imposed in 1801, and import duties on playing-cards, cocoa, coffee, chicory, dried fruits, tea, tobacco, wine and beer, spirits, liquor, cordials, and other articles manufactured of or containing spirits.

passes that of any other nation. It should be remembered, however, that England is an export country. The limited area of the British islands compared to their manufacturing capacity, offers but a small home market for an enormous output of manufactured products. Hence what England needs is cheap raw materials brought in duty free, to be converted into finished products for world-wide sale. The United States has pursued the policy of a tariff upon imports, and has shaped this tariff not with a view of fostering foreign trade, but as a protection to home industries. The duties have been especially high upon all classes of products which are produced within the United States in order to prevent the competition of foreign countries.

The enlightened policy of reciprocity has been one means of promoting foreign trade. Under this policy two nations mutually agree to admit the products of each other into their ports, either duty free, or at a reduction from the regular tariff.

Congress passed an Act in 1890 under which reciprocity agreements were entered into with Cuba, Porto Rico and several Central and South American countries, the effect of which was to greatly stimulate trade with those countries, but the law was abolished, and the agreements terminated on Aug. 27, 1894, after which our trade with those countries declined. We now have reciprocity treaties in force with several European nations* and under their potent influence our foreign trade with those nations is growing apace.

A bounty is a fee or percentage paid by the Government to a manufacturer for products exported, as an encouragement to an industry. By means of this Government aid the manufacturer is enabled to sell his products in a foreign market at a lower price, and thus compete with foreign manufacturers. The opposite of a bounty is a countervailing duty, levied upon imports in order to neutral-

Reciprocity

Bounty
Countervailing
Duty

*Under the Act of 1897, the United States made reciprocity agreements with Germany, France, Italy and Portugal, which are still in force.

ize the effects of a bounty offered by the government from which the goods were shipped. For example, Germany and several other exporting nations of Europe pay a bounty to their manufacturers on all sugar exported. Such sugar when imported into the United States has an advantage in our markets on account of the bounty, over Cuban sugar or that from our own refineries. To offset this advantage and protect other sugars in our markets, our Government may levy a countervailing duty in addition to the regular tariff.

Navigation and tonnage laws have at different periods been resorted to by this and other countries as a means of fostering shipping and encouraging foreign commerce. Soon after our Constitution was adopted, the United States passed a series of tariff and tonnage Acts by which the duties were lower on goods imported in American vessels entering our ports. About 1850 both England and the United States abandoned the policy of navigation laws and since that date no effort has been made through legislation to build up a merchant marine.* As a result our shipping interests have steadily declined since 1857. At that time we carried 75 per cent. of our foreign commerce in American ships. In 1902 this percentage had fallen to a little less than 8 per cent.

The term subsidy, as applied to shipping denotes the gift of a sum of money, either annually or otherwise, by the Government as an aid and encouragement to the extension and up-building of marine interests. From 1846 to 1856,—a period of ten

*A law was passed in 1792, and is still in force, requiring all ships which carry the United States flag and are registered as belonging to the United States, to be made in this country. Instead of stimulating ship-building in this country, this law has had the effect in recent times of causing large amounts of American capital to be invested in foreign-built ships, carrying foreign flags, since a steel ship could be built on the Clyde from fifteen to twenty per cent. cheaper than in this country. The abolition of this law is advocated by those who favor "free ships," so that American capital can sail under our flag, without regard to where the ships are built.

years, our Government pursued the policy of subsidizing steamship lines by paying large bounties for carrying the United States mails. As a consequence the tonnage of our steamships registered for deep-sea carrying, which in 1847 was 5,631 tons, increased to 115,045 tons in 1855, and our Merchant Marine reached its greatest height of strength and glory. The Collins Line of mail steamers was established between New York and Liverpool, under a favorable contract for carrying the mails and successfully competed with the heavily subsidized Cunard Line of England. Contracts were also entered into by our Government, with lines of steamers to the West Indies, Panama and Pacific Coast ports. But in 1856 the law was modified and the subsidies seriously reduced. In 1858 the subsidies were virtually abolished and the actual postage rate on letters carried was substituted. This continued to be the policy of our Government until the enactment of the Postal Aid Law of 1891, which in a measure increased the compensation for carrying the mail.

England has encouraged shipping by liberal subsidies, and through this means has built up lines of steamers to all parts of the world. She has awarded liberal contracts to her shipyards for the construction of war ships and transports in order to encourage the extension of private shipyards. Direct subsidies to shipbuilders and shipowners who would build after plans furnished by the Admiralty, and enormous indirect subsidies for carrying the mails, supplies or troops have been bestowed, by the English Government. France pays a bounty per ton on all ships built in French shipyards of steel and a subsidy per ton for every thousand miles sailed by French vessels.

A "tramp" steamer is one which has no regular sailing route, is not subsidized and goes to any port where it can secure a cargo. English and German tramp steamers are in all parts of the world. Sometimes a period of one or two years elapses

**Subsidies
Tramps**

**English
Subsidies**

before a tramp returns to its home port. Such ships have the advantage over those of a regular line, in that they are not obliged to sail on fixed dates and perhaps with insufficient cargo, but may cruise from port to port until a cargo is secured. Sailing ships aim to make direct voyages in which they can carry cargo both ways.

One of the first conditions of foreign commerce is the protection of property and persons in what ever part of the earth they may be. This can only be secured by a navy which shall command respect in every sea and port. "Trade follows the flag" is a commercial aphorism now well recognized by the great nations. No nation can hope to build up a large or prosperous foreign commerce which has not a well-equipped navy* sufficiently large to enable it to scatter ships to all quarters of the civilized world, within protecting distance of the interests of its citizens. Ship captains in the absence of Consuls should be allowed a degree of discretion in the settlement of questions requiring prompt action, where the rights of American citizens are in jeopardy. English ship captains have such discretion and may exact reparation for wrongs inflicted upon a British subject in a foreign port without waiting to communicate with their home Government.

**Trade Follows
the Flag**

As an important adjunct to our coastwise and foreign commerce the Government maintains over two thousand light houses at all danger points along our coasts, besides several thousand buoys, fog-horns and bells as guides to ships entering or leaving our harbors. Harbor masters are appointed whose duties include the regulation of shipping within the harbors, licensing of pilots, inspection of ships, etc.

**Light Houses,
Buoys, Etc.**

Although ships may sail upon any sea it is customary to require all vessels to be registered in some country. Ships are then said to belong to the country in which they are

*The United States stands third among the great nations in the tonnage of its navy, England being first, France second.

registered, and bear its flag. The ship carries papers stating the facts concerning its registry, ownership, inspection to secure safety, the name of the port from which it last sailed, its destination and the nature of its cargo. The custom of carrying papers originated in the attempts to suppress piracy, but is continued to the present time, chiefly for the information which it furnishes of a commercial nature.

CHAPTER L.

FOREIGN COMMERCE—Continued.

INTERNATIONAL LAW; TREATIES; CONSULAR SERVICE; FOREIGN EXCHANGE.

The law of nations is a system of usages, customs and opinions founded upon the general principles of right and justice as understood in this enlightened age, and which has become established by the great nations of the world.

International Law

This system regulates the conduct of nations towards each other commercially as well as politically, and is binding upon all by common consent. The great nations of Europe together with the United States, being, as we have reason to believe, the most enlightened and just of the world, as well as the most powerful, have established a code of international law peculiar to themselves. Under this law treaties are made and enforced, commerce between countries is regulated and the rights of citizens abroad are protected.

Treaties are of three kinds, viz., treaties of commerce, treaties of peace, and territorial treaties. Treaties of commerce define and establish the rights and extent of commercial intercourse. Every nation may enter into commercial treaties and grant such special privileges to other nations as it sees proper.

It may grant special privileges to one nation over another, or enter into special agreements as in the case of reciprocity treaties. It may even refuse to conduct any intercourse whatever with foreign nations, as was the case when President Jefferson laid the general embargo on

Treaties

trade in 1807, or it may reserve to itself such portions of its trade as it deems proper. An instance of this may be seen in the reservation of the coasting trade of the United States to our own ships. Treaties of peace are made as a result of war. They may provide for the payment of money, as indemnity, the cession of territory or the granting of special privileges, such as coaling stations, etc. Territorial treaties are in effect contracts made between nations for the purchase or sale of domain. Such was our treaty with France for the purchase of Louisiana, with Spain for the purchase of Florida, with Mexico for the Gadsden purchase, and with Russia for the purchase of Alaska.

In order to regulate foreign commerce, carry out the provisions of treaties and protect the rights of citizens abroad each nation exercises jurisdiction over its seamen, vessels and merchandise in foreign lands. This is done through the consular service. In every port of any consequence throughout the world the United States is represented by one or more consular officers. These are divided according to their rank and importance, into Consuls-General, Consuls, Vice-Consuls, Consular Agents and Commercial Agents. They are appointed by the President, and their compensation is fixed in one of three ways, viz.: (1) A fixed salary. (2) A salary with permission to engage in business, and (3) Fees, with permission to engage in business. Those who receive a fixed salary and devote their entire time to the duties of the office, embrace all of those officials who occupy posts in the foreign cities with which the United States has extensive trade relations. In this class of consulates the receipts from fees are paid over to the government. Those consuls who are allowed to engage in business occupy stations where the business of the consulate does not engage their entire time, and those who receive fees and are allowed to engage in business occupy posts in which the duties of the office require but a small part of the agent's time.

**Consular
Service**

The duties of consular officers in foreign ports are numerous and embrace the carrying out of treaty regulations; adjustment in cases of disagreement between master and seamen; salvage in cases of shipwreck; receiving reports of ship-captains on entering and leaving the port; sending to the home government reports on the condition of trade; granting of passports and protection of citizens; care of property of deceased citizens; extradition of fugitive criminals; certification of invoices of goods to be shipped to the United States, etc.

This latter is one of the most common duties of a consul. The invoices of all goods imported into this country must pass through the hands of the American Consul at the port from which they come.* If the goods are to be shipped from an interior town or city they are forwarded with full particulars as to their value, size, number, etc.; to a shipping or forwarding

agent in the seaport town who for a small commission attends to the details of shipment. The shipper makes out an invoice,—three copies.

These he takes to the office of the consul, and makes oath that the prices, quantities, etc., are absolutely correct. The oath is a precaution against fraud, for otherwise an American importer and foreign merchant might enter into a collusive arrangement for falsifying an invoice and making the price lower than it really was, thus defrauding the Government out of a portion of its revenue. The consul files one copy of the invoice at his office; one copy he sends to the custom house where the goods are to be entered for export and the third is given to the shipper, together with the consul's certificate. The shipper then turns the goods over to the agent of the steamship line, and receives a bill-of-lading also made out in duplicate or triplicate. The ship-

*Likewise the invoices of all goods exported from the United States must pass through the hands of the foreign consul at the port in the United States from which they are shipped.

per keeps one copy of the bill-of-lading, one copy is pinned to the invoice and consular certificate and forwarded to the consignee at the port of destination; and in some instances one copy goes to the ship's captain, as the "Captain's Copy."*

An important factor in foreign commerce, and one which exporters frequently overlook, is the proper packing of goods for export. This should be governed almost wholly by the conditions to be met with in the country to which the goods are sent. For mountainous countries without good roads, as for example,

Packing Goods South America, goods destined for interior towns are transported upon the backs of mules over rocky and tortuous roads, and hence must be packed in boxes or bales that can be readily carried in this manner, one-half the load being upon each side of the animal.

Again the arrival of goods in the rainy season or in the dry season would make a difference as to the method of packing, but as a general rule all merchandise which would be injured by water should be packed in boxes lined with zinc and oilcloth, or waterproof paper, or if packed in bales should be covered with oilcloth or tarpaulin beneath the outer coverings of the bale. As far as practicable only one kind of goods should be packed in a box or bale, otherwise there may be trouble in passing the goods through the foreign custom house.

Houses engaged in foreign commerce use a distinctive mark—a trade-mark,—of such a character or design as to be recognized by the purchasing public in whatever country the goods are offered for sale, as the mark of the American
Trade Marks manufacturer or exporter. We are told that the "Mt. Vernon" brand of flour made by George Washington was accepted abroad as of especial excellence, and the same would be true to-day in regard to the value of a special

*When a bill-of-lading is made out to order it is transferable by endorsement the same as inland bills. The bill has printed across its face "Original," "Duplicate" or "Triplicate," one of which being honored by delivery of the goods, the other two become void.

name or mark. Foreigners are often unable to discriminate or judge of the merits of foreign manufactures, and knowing that a certain brand has been tried and found satisfactory, they continue to purchase it. The United States has entered into agreements with nearly all of the leading commercial nations with regard to the protection of trade-marks, but in order to secure this protection the trade-mark must be registered. Mere use, however long continued, does not, as in this country, determine the right to the exclusive use of the mark.

An important element in foreign trade operations is the banking feature. As previously explained, one of the important functions of banks is to supply the necessary capital to bridge over the interval of time between producer and consumer. This in the case of foreign trade is necessarily considerable, since the producer or manufacturer is situated perhaps thousands of miles from the consumer, and weeks or even months are required before the products reach their destination and are paid for. When goods are shipped to a foreign customer in many cases no drafts are drawn, the amount being simply charged in account to await remittance by bank draft through due course of mail. In other cases documentary drafts are drawn for the shipment C. I. F.* and forwarded through the bank. Such drafts are usually payable at sight or a given number of days after sight and the shipping documents† attached are to be surrendered on payment. If the draft has considerable time to run it is generally discounted with a home banker.

Drafts drawn against foreign shipments are usually made payable in the currency of the country in which they are to be paid. Thus a shipment to Germany is payable in marks, to Mexico in pesos, etc. The seller takes the risk of fluctuations in exchange,

*C. I. F. means cost, insurance and freight.

†The shipping documents here referred to consist of invoice, bill-of-lading and insurance certificate.

and this is one of the disadvantages in selling to customers the rate of exchange in whose country is not uniform.

The bank forwards the draft with documents attached to a bank at the place where it is payable. The bank there presents the draft for payment or acceptance. If a time draft, the goods are usually landed and warehoused by the bank, until the draft is paid. In case the consignee desires to withdraw a portion of the goods from the warehouse he may arrange with the bank to do so by paying a portion of the draft, the amount being endorsed thereon. At maturity the draft is paid plus interest from its date until the approximate time it will require a remittance to reach the point of shipment in the United States, and also plus the storage charges. The bill-of-lading and insurance certificate are delivered to the drawer when the draft is paid.

Within twenty-four hours after a ship touches a dock in any port of the United States the captain or a duly authorized officer must hand in to the Custom House the "Ship's Report." No goods can be landed nor even bulk broken until this formality is complied with.* This report is a document in prescribed form giving the name and tonnage of the vessel, name of the captain, number of the crew, port from whence arrived, and a full and complete detailed list of the entire cargo, the number of boxes, bales, barrels or casks and their contents so far as is known, the names of the shippers and the consignees. This report is made out in duplicate. One copy is retained in the Custom House and the other is sent to an officer at the dock where the ship is to unload, who checks off the goods as they are discharged from the vessel. The goods are now delivered to holders of bills of lading, upon payment of the freight and duties or other charges, or if not called for at once, are sent to bonded warehouses.

*This report is usually given to the custom house officer who comes aboard, in many cases with the health officer.

When a vessel is completely loaded the master must, before being allowed to sail, receive his clearance papers from the port authorities. The permit to sail is based upon the captain's report of cargo and passengers, payment of dockage, pilotage, seamen's wages, etc. When these are satisfactory, permission is given to sail.

**Clearance
of Ships**

FOREIGN EXCHANGE.

CHAPTER LI.

INTERNATIONAL SETTLEMENTS.

INTERCHANGEABLE VALUES; MINT PARITY; ARBITRAGE; GOLD SHIPMENTS.

International trade, or the exchange of commodities between nations, requires a medium by means of which resulting balances can be satisfactorily settled. The ultimate medium adopted for this purpose is pure gold, and this metal is the basis of all calculations in connection with foreign exchange. Of course for practical purposes the metal must have an alloy, and each nation has determined the quantity of base material employed independent of other countries, but nevertheless they are all pretty nearly in unison. The general system employed is 9-10ths pure gold and 1-10th alloy, with the exception of Great Britain, which uses 11-12 and 1-12. A further circumstance is the legal value placed upon the metal, thus giving assurance for all time that its value will be stable; and it is this officially made stability which renders it possible to determine the value of the money of one country in that of another. The value of gold in the following countries as determined by law is respectively:

Great Britain, 1 oz.,	11-12ths fine = 77/10
United States, 25 8-10ths grains,	9-10ths fine, \$1.00
Germany, 123.915 grains,	9-10ths fine, M. 20
Latin Union, 99.561 grains,	9-10ths fine, F. 20

Taking these gold values as a basis we arrive at the following interchangeable values of the various coins:

One pound sterling weighing 123 27-100 grains 11-12 fine equals \$4.8665, equals Fc 25.2215, equals Marks 20.4296. This is what is termed the mint parity, or the value at which the respective mints in London, Washington, Paris and Berlin, would accept the coins of each of the other nations.

The following weights of the principal coins of the four above-named nations, will enable the student to follow out the calculation for himself:

1 Eagle or \$10 = 258 grains, 9-10 or 232 grains pure gold.
 Sovereign, £1, = 123.270 grains, 11-12 or 118 grains pure gold.
 1 Double Crown, or M. 20 = 122.915 grains, 9-10, or 110.624 grains pure gold.
 1 Napoleon or Fc. 20 = 99.561 grains, 9-10, or 89.605, grains pure gold.

The foregoing is the fundamental basis of foreign exchange, and with these principles firmly grasped, the various ramifications of the business are readily understood.

In the early period of international commerce, when each European principality coined its own money and falsified and clipped it according to the needs and exigencies of its petty sovereign, the only international medium of exchange was the promissory notes of the great merchants of the middle ages. These notes circulated the year around as money, and were payable as a rule on certain days at certain cities where the great annual fairs were held, and were redeemable at fixed values in silver. A striking instance of the power wielded by these merchant princes is to be found in the history of the steelyard in London, a settlement of Hansa merchants in the city, making their own laws and governed only by their own rules and traditions, regardless of the laws of the land whose hospitality and protection they enjoyed. The pound of silver was the measure of value, but the pound of silver was an unknown quantity unless it was designated in the bond as a pound of silver of the Esterlings, or strangers—hence the origin of the term Pound Sterling, which

Interchangeable
Values
Mint Parity

Historical

has subsequently been adopted as the denominational standard of value of Great Britain. Modern legislation has remedied all the defects of the earlier systems, but a recital of former conditions is none the less interesting as an introduction to our present methods, which are the fruits of evolution and have been placed upon a scientific basis of fact.

Goods are being transported from one country to another, and this is the natural method of liquidating an international indebtedness. This failing, recourse is had to the transfer of credits arising out of former transactions, and as a last resort, refuge is had to shipping bullion or minted coin. Let us follow a shipment of hardware from England, valued at say \$1,000, to South America, where for argument's sake it has been disposed of for \$2,000.

**Liquidation of
International
Indebtedness**

Instead of remitting the money to England and sending the ship back empty, the agent of the English merchants purchases hides, which are forwarded to France, as the best market, and are there sold for \$4,000. The ultimate result of this transaction is that France owes England a debt of \$4,000 which must be liquidated in either of the foregoing methods. Now the probabilities are that goods will be forwarded to England and there disposed of at a profit. We have assumed that this train of transactions has been carried on by one merchant and his agents, but this is not the modern way, and it is here that international banking steps in as the connecting link between each transaction, but the

**International
Banking**

ultimate liquidation has taken place by the shipment of merchandise notwithstanding. In each case the banker has been called upon to provide the funds and the buying and selling of the bills of exchange is what constitutes the liquidation. But, nevertheless, the exchange of merchandise is the essence, hence it is clearly demonstrated that the economical method of liquidating an international trade balance is through the sale of commodities.

This constant interchange of commodities creates credits and debits and foreign transactions are carried out primarily with a view to adjusting these balances. The debits are set off against the credits, and only the balance is left for settlement in money. A merchant shipping goods to a foreign port desires reimbursement therefor immediately the goods are loaded. He therefore draws on the purchaser, attaches to the draft all evidences of the shipment, and negotiates the draft through his banker. He here incurs a risk that on arrival the purchaser may be insolvent, or for specious reasons may refuse to accept the goods, thus entailing loss and perhaps ruin, consequently this method is only adopted where the shipper is well acquainted with the purchaser's financial standing. Otherwise he requires a bank credit—i. e., an undertaking on the part

of a bank that his drafts if drawn under certain conditions will be promptly paid. We will say the above shipment was made to Germany, but the banker negotiating the bill has no use for funds in that country, but desires the money in London. Now any number of courses are open to him, which will enable him to place the money to his credit in London. He can send the bill of exchange to his Berlin bankers for discount, if it is a time bill, and instruct them to buy a transfer on London; or he can remit the bill direct to London and sell it in the open market; or he can have his Berlin bankers buy French exchange and remit this to London for sale, or purchase therewith in Paris transfers on London. There really is no end to the combinations that can be made, but for all practical purposes there are very rarely more than three, and those under very peculiar conditions; but the writer recalls one particular transaction which required the intermediary of four financial centers before it was brought to a satisfactory conclusion. This method of adjusting balances

is called **arbitrage**, or arbitration, and is quite common among foreign bankers; in fact by some is made a special feature of the business.

The parity of exchanges with America as the center, is as follows:

Sterling	486.65
Germany	95.20
France and Latin Union.....	518 $\frac{1}{4}$

As the exchanges are above or below these points, they are said to be in our favor or against us, and this is the only real indication of balance of trade conditions, as published statistics are fallacious and more or less misleading. As an instance, let us take the published Treasury statement of the U. S. for December, 1902, which shows an excess of exports over imports for the preceding fiscal year of \$670,000,000, leaving the impression that the U. S. was at that time a creditor nation, while as a matter of fact the reverse obtained, as evidenced by the current quotations of foreign exchange which were all far above the res-

spective mint parities. Trade balances are not the only factors determining the rates of exchange. Rates of interest, general economic conditions and local causes have also a great deal to do with fluctuations. When money rules high it attracts a great foreign investment, which is made use of by so-called finance bills, but at times the opposite condition prevails and advantage is taken of higher rates of interest abroad by purchase of time bills in foreign centers for temporary investment purposes.

Where one country cannot liquidate its debt to another by shipping what it produces, or returning securities which were held for investment, or selling its own securities, recourse must be had to gold shipments, which point is reached when exchange rises sufficiently above the mint parity to cover the cost of

transportation, insurance and other minor expenses. An additional factor is the market price for gold at point of destination. In view of the fact that the mint price for gold at all important centers is determined by statute, this last statement might seem anomalous, but such is the case nevertheless. The quotations for foreign coins

Gold
Shipments

varies from day to day in accordance with the desire of the market to encourage or repel gold shipments. The mintage price for bar gold is always the same, but often a premium is paid if there is a scarcity. This applies to England; in France and Germany other methods are in vogue of a more arbitrary nature, but none the less effectual. England and America are free traders in this respect, and thus it always is, when gold is required anywhere in the world, that either of these countries is called upon to supply the needed metal. As an instance, in the year 1902, gold shipments were made from New York to Argentina, although New York owed Argentina nothing. America, however, was heavily in debt to Great Britain, and the latter country being called on for a remittance, simply turned the requisition over to the United States. The year previous a similar course was pursued when France demanded liquidation of a debt owing by England, and which England was unwilling to pay. The consequence was that the exchange on London fell to such a low point that it became profitable to ship gold from America to France wherewith to purchase English exchange, and thus was the burden of liquidating the French debt thrown upon the New York market, while at the rate of exchange prevailing between New York and London, a direct shipment of gold to the latter point would have been connected with a serious loss.

It is obvious that in speaking of exchange operations between two countries, the money of one country must be taken as the standard or basis, the money of the other being considered as fluctuating or variable. It is natural and customary to regard the money of one's own nation as the standard, as a rule, with one exception, to which reference will be made later on. Thus when we read in the quotations that exchange on London is unfavorable, or against us, we mean that it is at a premium in New York—i. e., a good bill on London is worth in New York more than \$4.8665 per Pound Sterling. A typical quotation list would read as follows:

**Basis of
Exchange**

Sterling, demand.....	485½	60 days, 483½	90 days, 481½
German Marks, demand, 95½		60 days, 94½	90 days, 94½
France, demand.....	518½	60 days, 522½	90 days, 523½

which means that

1 Pound Sterling is worth \$4.85½.

4 German Marks are worth 95½ cents, and (this is the exception referred to) \$1 is worth 5.18½ Francs.

In Germany the quotations would read:

Sterling demand	20.89 (Marks for £1 Sterling).
U. S. Dollars.....	4.17 (Marks for \$1.00).
Francs.....	81.10 (Marks for F. 100).

In France:

Sterling demand.....	25.15 (Francs for £1 Sterling).
U. S. Dollars.....	5.18 (Francs for \$1.00).
German Marks.....	123.25 (Francs for M. 100).

In the foregoing countries it will be noted that each country takes its own currency as the standard, with the single exception of the quotation for French exchange in America.

In England, on the contrary, the foreign countries are the variable quantities—e. g.:

United States.....	4.87
Germany.....	20.89
France	25.15

American exchange is sometimes quoted at so many pence per \$. e. g., 49 13-16d. Reverting now to the quotations in New York, everything being equal, and Sterling exchange quoted at 485½, on the basis of the mint parity exchange on Germany should be about 94 13-16c. + 1-32%, and French exchange about 520—1-16%, and the question naturally arises, why this discrepancy? It is to be found in the different interest rates prevailing in the respective centers, which again finds its expression in the exchange rates for or against. Thus in London the discount rate is 2½%; in Berlin 3½%; in Paris 2½%—and as expressed in exchange rates, 485½, 2039 and 2515. Thus:

$$2039 + 48525 = 23798 \times 4 = 95 \text{ } 8\text{-}16 \text{ approximately.}$$

$$48525 + 2515 = 518\frac{1}{2} \text{ approximately.}$$

and in this way we arrive at what is called the parity of exchange as distinguished from the mint parity—i. e., prevailing conditions are taken into consideration and reconciled.

CHAPTER LII.

FOREIGN EXCHANGE—Continued.

INSTRUMENTS OF EXCHANGE; QUOTATIONS; THE ARITHMETIC OF EXCHANGE.

A further factor, and one of considerable importance in its effects upon trade balances, at least as far as this country is concerned, is the personal expenditure of travelers abroad. It is roughly estimated that this amounts to something like \$150,000,000 per annum. In order to meet the needs of this class, a peculiar instrument has been called into being—the Letter of Credit, which is addressed to a certain number of banking firms, and sets forth that N. M. is the bearer, and is entitled to draw upon a certain bank, generally located in London, for a specified amount. Payments as made in different localities, are indorsed on the Letter of Credit itself, and when exhausted it is returned with the last draft. A modification of this instrument is found in the Circular Note, or Travelers' Check, which calls for a specific amount in U. S. Dollars, and is payable in various countries at certain fixed rates. A further important instrument in connection with the Foreign Exchange business, is the Commercial Letter of Credit, used principally by importers. This is usually addressed to a firm by a bank or banker, authorizing them to value on its correspondent for a fixed amount, and engages that the drafts drawn thereunder will be protected if drawn in accordance with the terms of the Letter of Credit. The terms are, as a rule, that the draft should be accompanied by Bills of Lading, Consular Invoices and Insurance Certificates, showing

the shipment of goods purchased. The most common instruments used in foreign transactions are checks or cheques, demand drafts and time drafts. Checks are most commonly used for payments on demand. Most countries have legislated in favor of this method of transferring funds by means of the entire abolition, or modification, of the stamp tax—hence demand drafts are very seldom used. In continental countries the circulation of a check is limited as to time, particularly in France, and in order to avoid the possibility of a change in date the law in that country requires that all checks be dated in words, thus—August fourteenth, 1903—instead of Aug. 14, 1903; and in Germany a check must expressly state that the funds transferred are derived from a balance due the maker. A peculiar method in vogue of evading the stamp tax in Germany when it is not possible to make the required declaration as to funds due, is to issue what is called a delegation—i. e., a communication addressed to the beneficiary that a specified sum will be held at his (the beneficiary's) disposal upon his application to certain designated parties. This instrument is not intended for circulation, as its very nature deprives it of that characteristic. Demand drafts have been almost entirely displaced by checks and delegations, hence are very rarely used. They are subject to a tax of $\frac{1}{2}$ per mille, ($\frac{1}{2}\%$) in most all European countries, the same as time drafts.

Time drafts on merchants, with shipping documents attached, enable the purchaser to dispose of the goods by sale before paying for same, and generally contain a provision where the documents are held as security for the payment of the draft that in the event of the drawee desiring to withdraw the merchandise, he can do so upon payment of the draft, less a rebate of interest at the official bank rate for the unexpired time. This on the Continent. In England such a draft may be paid prior to maturity under a rebate of interest of $\frac{1}{2}\%$ above the advertised rate for

Checks and
Drafts

Time Drafts

short deposits in the London Joint Stock Banks, which as a rule is $1\frac{1}{2}\%$ below the Bank of England rate. Thus should the Bank of England rate be 3%, the rebate rate would be 2%.

The regular quotations of foreign exchange cover three distinct classes:

1. Posted rates. These are rates arbitrarily determined by international bankers in New York for the purpose of adjusting foreign currencies payable in the United States, and are generally somewhat higher than the actual rates.

2. Actual rates, are the rates at which bankers will sell their own drafts, telegraphic transfers, etc.

3. Commercial rates, are the buying rates of bills of exchange, etc., issued by merchants in the regular course of business. A typical quotation list would read as follows:

Sterling.	Tel. Transfers.	Sight.	60 days.
Posted rates.....	.....	487 $\frac{1}{2}$	484
Actual.....	485 $\frac{3}{4}$	485 $\frac{1}{2}$	483 $\frac{3}{4}$
Commercial.....	485.40	485	483
Germany.			
Actual.....	95 11-32	95 $\frac{1}{2}$	94 $\frac{3}{4}$
Commercial.....	..... 8 days	95 $\frac{1}{2}$	94 $\frac{1}{2}$
France.			
Actual.....	517 $\frac{1}{2}$ — 1-32	518 $\frac{1}{2}$	520 $\frac{5}{8}$ + 1-16
Commercial.....	..... 8 days	519 $\frac{3}{4}$	521 $\frac{1}{4}$

It must be noted that the quotations for French exchange progress by $\frac{1}{8}$ of 1%, and as the quotations are for so many Francs and Centimes per dollar, each progression would be the equivalent of $\frac{1}{8}$ of 1% in our money, and when it is desired to shade the rate either up or down, this is done by quoting the rate plus 1-16%, plus 1-32%, or minus 1-16 or 1-32. It must be further noted that as the foreign denomination in this case is the variable quantity, the higher the quotation the lower the rate of exchange.

Taking the sight draft as a basis, the following calculations will demonstrate how the quotations for telegraphic transfers and 60 d/s bills are arrived at; e. g. quotation for sight drafts on England, 485 $\frac{1}{4}$. Sight drafts or checks have an average circula-

tion of ten days, hence the interest accruing on the amount drawn until presentation for payment is enjoyed by the seller. With telegraphic transfers, however, which are immediately payable, this benefit falls away, so interest for ten days must be added to the quotation of sight exchange in order to arrive at the price of a telegraphic transfer. Thus:

Sight draft or check.....		485.25	
+ Int. 10 ds. 8% approx.....		.87½	
		<u>485.62½</u>	
Bankers' bills, or where documents are to be surrendered on acceptance.			
Demand.....			485.25
Less stamp.....		.24	
Interest 68 ds. 2¾%.....		2.41	2.65
			<u>482.60</u>
60 days bills with documents attached which are to be surrendered on payment of the bill.			
Quotation for demand.....			485.25
Less stamp.....		.24	
2% int. 68 days.....		1.68	1.92
			<u>488.83</u>
Telegraphic Transfers.			
Marks.	Demand.....		95.25
	Interest 10 days 8¼%.....		.08
			<u>95.83</u>
Bankers' bills, clean commercial bills, or such with documents to be surrendered on acceptance.			
Demand.....			95.25
Stamp ½%.....		.48	
Int. 60 days 8¼%.....		5.12	.56
			<u>94.69</u>
Commercial bills with documents to be surrendered on payment under rebate of interest at bank rate in the event of bill being paid prior to maturity.			
Demand.....			95.25
Stamp ½%.....		.48	
Int. 60 days 4% (Bank rate)..		6.82	.68
			<u>94.57</u>
Francs.			
T/T*			
Demand.....			5.18.25
Less 10 days int. 8%.....			.43
(517½ - 1-32 = 517.66).			<u>5.17.82</u>

*Telegraphic Transfers.

Bankers' Bills.

Demand.....	5.18.12.5
Plus stamp.....	.36
2½% int. 60 days.....	1.84
	<u>2.10</u>
(520% + 1-16 = 520.80).	5.20.22

Commercial Bills.

Demand.	5.18.12.5
Plus stamps .....	.36
3% int. (bank rate) 60 days...	2.60
	<u>2.86</u>
(Quoted rate 521¼).	5.20.98.5

In determining the value of time bills, other items of cost must be taken into consideration, such as commissions to be paid to bankers abroad for handling the items, etc.

In discounting bills in England it must be noted that the 3 days of grace allowed by law are taken into consideration in calculating the discount while on the continent, where grace is also customary, only 60 days are brought into computation.

Days of grace, as applied on the continent, have relation only to the notarial act of protest in the event of non-payment—i. e. if a bill matures on Jan. 1 and is not paid, it will not be protested until three working days thereafter. On the other hand it is customary in Germany, when discounting a batch of bills, to apply the bank rate on 5 days and the current rate on the remaining days the bills have to run.

In the foregoing only the three principal, commercial countries have been considered on account of the limited space, but the principles as applied are the same in other countries, barring, of course, local usances. The following calculations based on actual transactions will demonstrate many of the principles laid down in the foregoing pages: A batch of 90 d/s bills on London, amounting to £65,000, was bought in the New York market for remittance to London where the money was immediately needed. The natural course would be to secure the discount by cable for bills to arrive—i. e., to go forward by first steamer. The rate received was 3½%, showing the following result:

Amount of bills.....		£65,000
Less $8\frac{1}{4}\%$ discount 90 days.....	£587.15	
Stamps.....	82.10	620. 5
		<u>£64,879.15</u>

Simultaneously an offer was received from a Berlin bank to buy 90 d/s bills on London at 2032, or 20 Marks 32 pfennige per £, which price included stamps, brokerage and discount. However, the money was needed in London and not in Berlin, so enquiry elicited the fact that telegraphic transfers on London could be bought at 2048 $\frac{1}{4}$ thus:

£65,000 @ 2032 =	M. 1,330,080
@ 2048 $\frac{1}{4}$ =	£64,433.10

The disposal of the exchange in Berlin being the more profitable by £53.15, it was sent there. Another case, where the operation is reversed—

M. 1,000,000 90 days on Berlin sold in London	
@ 2057	£48,615.19
Exchange there against sold in New York	
@ 485 $\frac{1}{4}$	\$335,908.88

If remitted to Berlin for discount and exchange sold there-against in New York, the result would have been as follows:

90 days bills Berlin.....	M. 1,000,000
Less $8\frac{1}{4}\%$ disc. 90 days, M. 8135.00	
Stamps	500.
	<u>8,635</u>
	M. 991,875

@ $95\frac{1}{2}\%$ + 1-64 \$335,798.19

By remitting Berlin exchange to London a saving of \$110.69 = $\frac{1}{2}\%$ (per mille) was effected.

London is the only European open market for gold, hence the fluctuation of exchange on London in New York is limited to the actual cost of shipment of bullion and the expense for interest while in transit, approximating $\frac{3}{8}$ of 1 per cent. above or below the mint parity—whereas in the case of Berlin or Paris exchange the fluctuations have a wider scope, dependent upon the premium charged or allowed for gold, and have been known to approach a variation of pretty nearly one per cent. above or below the mint parity.

Fluctuations
in Exchange

Foremost among the exchange centers of the world stands London, with the Bank of England, surrounded by a most wonderful group of Joint Stock and private Banks. The other European centers are Paris with the Bank of France, and Berlin with the Imperial Bank. These three institutions stand guard over the financial destinies of the world, and their weekly statements are eagerly scanned by financiers as the true trade barometer. So sensitive, indeed is the world of finance that when occasionally a meeting of the Board of Directors of the Bank of England is extended a few minutes beyond the usual time this fact immediately becomes a cause for apprehension, and it is said that the discussion of an irrelative subject among the directors after the close of a board meeting at a critical period almost caused a panic on the Stock Exchange. These centers are engaged in a constant warfare, one against the other, and while the hostilities are of a peaceable nature, the methods employed are quite drastic at times; still, when a common danger threatens, these three great institutions are ever ready to extend to each other a helping hand.

Owing to the peculiar features of the banking laws of the United States, conditions in this country are somewhat different and not so easily regulated in times of stress as they are abroad. Our clearing houses act as a unit and are the determining factors when decisive steps have to be taken for the protection of the commercial community.

Gold, as has clearly been demonstrated, performs the function of settling international trade balances best, and upon reference to the financial papers of the day it will be seen that there is constantly a movement of the metal—flowing regularly through the arteries of trade, subject to natural laws as unalterable as those in the material world, and after having performed its duties in revivifying commerce returning to the exchange centers of the world,

**Exchange
Centers**

**Ebb and Flow
of Gold**

only to be ready at a moment's notice to again go forth on its mission to benefit the human race, by developing the resources of distant parts of the world,—perhaps the wilds of Canada or the rice fields of India, or to supply the sinews of great enterprises such as transcontinental railroad lines.

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